

BOSTON'S OWN COMPUTER NEWSMAGAZINE SINCE 1986

COMPUTER *Currents*®

Volume 7 Number 6

MONTHLY

June 1992

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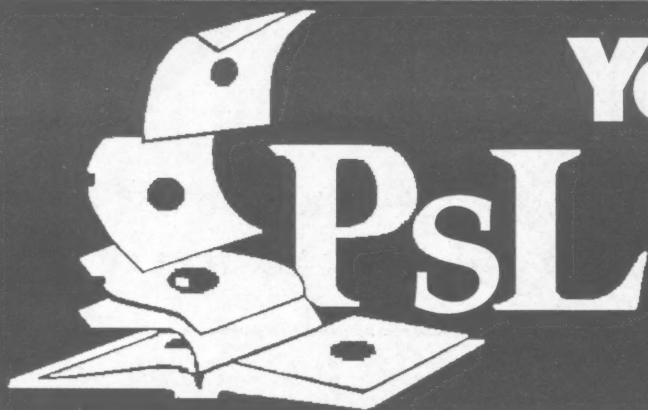
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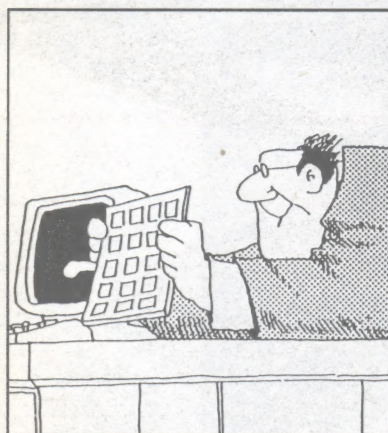
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Publication Date	Deadline
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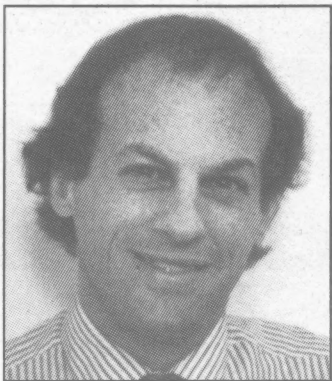
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Macintosh Enters Final Frontier



Apple has recently demonstrated prototype software code-named "Casper" that will let future Macs recognize and respond to human speech. Such voice recognition capabilities have actually been available on personal computers for years, but only with the addition of expensive hardware add-in cards.

Apple has not said when it expects Casper to be ready, but it's probably about two years

away from showing up in products, according to Patrick Sweeney, Director of Marketing for Articulate Systems, Inc., a voice recognition company familiar with Apple's work. Articulate (based in Cambridge, Mass.) has been marketing Voice Navigator for several years, a hardware-based voice recognition product for the Macintosh II. The company recently launched Voice Navigator SW, a software-only version that works with any Mac sporting a built-in microphone, including the Classic II, LC, LC II, SI and the new PowerBooks 140 and 170. In addition to the convenience of a simpler software installation, the price for Voice Navigator SW (\$399) is hundreds of dollars less than the earlier hardware version and includes a choice of a unidirectional desktop or headset microphone. The company is also working on a Microsoft Windows version.

But What's it Good For?

I say the Mac's entered a "final frontier" because voice recognition has a long way to go before it's perfected. Both the Apple and Articulate systems are designed for "command and control" in that they're aimed at letting you operate the computer by voice commands, but not as a voice recognition dictation machine.

With Casper, Apple is shooting for voice independence, i.e. the user doesn't have to "train" the software (via trial and error, repeating different spoken commands) to recognize the speech of specific users. Voice Navigator is primarily voice dependent, meaning there is a one time setup period of a half-hour to an hour where the user trains the system in the various Mac commands—Cut, Copy, and Paste, for example. Sweeney says he expects Apple to license its technology to developers like Articulate which will be able to incorporate all or parts of it into future products. In a similar vein Apple is expected to announce a text-to-speech technology (where the computer speaks words that are typed in) this summer that will also be licensed by independent developers for upcoming products.

The "command and control" level of product is not positioned as a substitute for the keyboard and mouse. Even Star Trek's Enterprise crew, though they frequently bark commands at the ship's computer, often resort to punching in requests on a computer console.

In a demonstration for *Computer Currents*, Sweeney put Voice Navigator through its paces, calling up the MacDraft program, creating a design on the screen, adding a line of text, aligning it to the right side and making it 18 point Helvetica, all by voice commands. I then donned the headset microphone, took a few minutes to train the system, and was able to perform a few standard Mac operations by voice command without error. I could see where this command and control setup could be a nice complement to the normal pull-down menu, mouse click and drag operations, which can get tedious for those of us spending the better of each work day at the computer.

"In two to three years, every computer will have some kind of voice option," says Sweeney. "The only thing faster is telepathy."

David Needle

LETTERS

Windows and Ventura

Editor:

Thanks for your enlightening article on Ventura 4.0 ("Five Reasons...") in the May Boston *Computer Currents*.

I'm using the Windows version of 4.0 and find it to be the slowest and most unstable Windows program I run. It takes much too long to load, and it still can crash — although not as frequently as it did under Windows 3.0.

I also run CorelDraw, which I think is as large and complex an application as Ventura, and it is well-behaved and quite a fast beauty. Apparently Corel's programmers know things that Ventura's don't.

My system is a 16MHz 386DX with 4 megabytes of memory running MS-DOS 5.0. All in all, it does quite well

with Windows. Incidentally, I switched from WordPerfect 5.1 for Windows to Microsoft's Word for Windows — again because of speed of execution and stability. I also don't like the idea of WordPerfect's half-hearted support for Windows printer drivers. (I think, also, that the Orem, Utah people resent having to adjust to the Windows environment, which makes them have to emulate the things that WinWord does.)

How aware is Ventura of its Windows environment lapses? I'm forwarding a copy of this letter to them, and I hope all other users are getting the message to Ventura Software, Inc. Again, appreciated your article.

Jack Foss
San Francisco, Calif.

No Buts About It

Editor:

Regarding your May 1992 issue, page 21, the article by Rick Altman on Ventura:

"4. Great Screen Fonts: No doubt about it, Ventura 4.0 kicks butt over GEM Ventura..."

Kicks butt? Is yours really a professional publication? If Rick Altman is an author and lecturer, I think he could find a classier way to express himself.

A.M. Newsome

Connecting Buyers and Sellers:
Fax-A-Quote

Computer Currents introduces a new service beginning this issue: Fax-A-Quote. The basic idea is that readers with fax machines can use the Fax-A-Quote form to check off what computer equipment you're interested in buying. Your requests will be re-sent by us to *Computer Currents*' advertisers participating in the program who will then fax, call or mail you (whichever you prefer) their latest product information, services and specific bids on the products you asked about.

"The goal of the service is to provide a fast, easy, and inexpensive way for our readers to get price quotes on computer products and peripherals," said Stan Politi, president of *Computer Currents*. "This system provide buyers with a lot more pricing and information on value-added services from a variety of dealers than they would normally receive. At the same time dealers get a direct connection to people interested in buying computers," Politi added. "Also, dealers not carrying products specified in incoming Fax-A-Quote forms will be able to garner valuable information on computer buying trends, helping them decide on new lines to carry."

Fax-A-Quote forms will appear in every issue and may be photocopied. *Computer Currents* will also supply additional forms to active buyers on request.

Dealers interested in joining the Fax-A-Quote Network should call *Computer Currents* at 508/820-8118.

CORRECTION

In the chart accompanying the article "Buying A Notebook PC" (March 1992), the prices quoted for two Leading Edge models were incorrect. The following prices are correct: N3/SX20 30 MB, \$1,999; and N3/SX20 60 MB, \$2,499. We regret any inconvenience the error may have caused.

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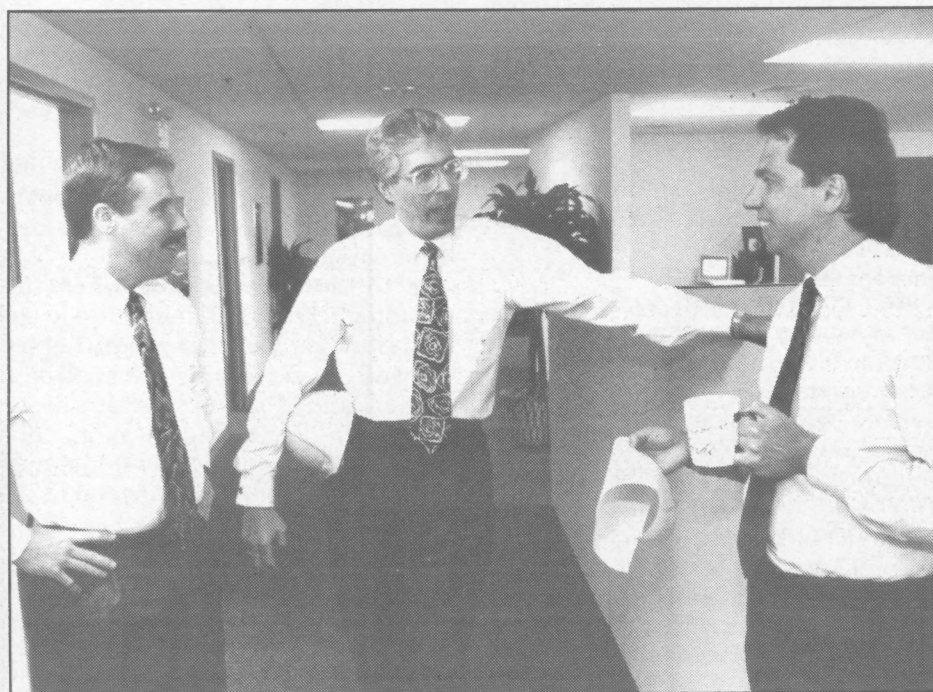
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By Marguerite Zientara

Does "Super Direct" Selling Spell Death Knell for Local Computer Retailers?



PCs Compleat's William Brown, Gordon Hoffstein & Jack Littman-Quinn (l. to r.)

This month's feature on PCs Compleat (page 11) is more than just a profile of a single, local company. It is also, whether we like it or not, a loud and clear signal of changes to come in the PC retail arena.

PCs Compleat's hybrid approach to selling — combining aspects of distribution, mail-order, direct marketing, and value-added resellers (VARs) — may be causing small retail computer stores some sleepless nights.

Strong support, the ace-in-the-hole of local retailers, is now available from a national company that is giving it away for the lifetime of the buyer. Even for small retailers, lifetime toll-free support would be considered a surprisingly generous proposition.

The real strength of PCs Compleat, however, is in the very automation that the industry is trying to sell to everyone else. Its telesales efforts snake out from a single location, Marlborough, Mass., to Everywhere, USA. "We don't need to be in a community of 5,000 people to support us," says Gordon Hoffstein, president and CEO. "We can be anywhere."

The question remains, will "super direct" telesales put local stores out of business? "There are many things that are putting the old classic computer dealer out of business," says Seymour Merrin, publisher of *The Channelmarker*

Letter (Palo Alto, Calif.). "This is just another one of the many large rocks being placed on their chest. There's the superstores, and the office product stores and the warehouse clubs and the direct vendors."

Hoffstein sees the situation in a similar light. "The economics of the industry are putting the storefront dealers out of business," he observes. "It's a very volume-driven, low margin business." When PCs Compleat buys its stock in larger and larger OEM quantities, the prices keep dropping and profits keep rising. Small stores simply can't buy in such large quantities.

"Still, I don't think we can generalize," Hoffstein notes. "In some areas the storefronts are doing fine. Maybe they're near a college or they can support a local community where there isn't a superstore. But I think the move toward superstores, the move toward mass merchants, and now our type of selling, isn't going to do a lot of storefronts any good."

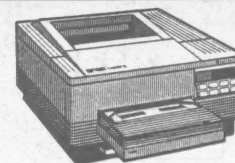
The fact is, in a maturing market, buyers generally are more sophisticated, looking for the best price above all else. And yet, people are people. "Some people don't like to buy that way [through telesales]," Merrin observes. "Some people like to go into a store and buy, so they won't buy from PCs Compleat."

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BOSTON BEAT

FROM PREVIOUS PAGE

Chances are, if a local retailer has built up a loyal clientele in the community — and many have — those customers will keep coming back to see the friendly faces at their neighborhood computer store. As Hoffstein observes, "If people have a negative experience with a system, and if you can fix it, they become customers for life." And that applies to all channels.

The New England Uses Multimedia to Train Salespeople

In the midst of all the hoopla about multimedia's potential for training and education, it's sometimes hard to find concrete examples of its effectiveness. Right here in Boston, however, The New England insurance company is deeply involved in multimedia for training.

"These days, the people we're trying to train in the work force are 'TV babies,'" observes Marty Colletti, director of human factors and multimedia for The New England. "They want to be entertained."

Even with budget constraints imposed on her department since last summer, Colletti has managed to implement entertaining training through multimedia, saving days of learning time per student.

Speaking at the recent Multimedia Showcase presented by the Boston Computer Society and Microsoft Corp. at Aquinas College in Newton, Mass., Colletti described some of the secrets of her success.

they couldn't retain the information two days after they passed the quiz," she notes.

"We didn't want to have them just click through the pages with a mouse," Colletti says, "so we added audio — recorded, digitized scripts that added up to 70 megabytes of files." Eleven people have gone through the multimedia version to date and "they like it," she says.

Another approach Colletti has used is to make learning into a game. For the company's course on "Meeting Guidelines," her department created a Jeopardy-like game, wherein "players" can ask for such topics as "Guidelines for \$100." The approach "makes people want to go through the course," she reports. "It's the 'Play and Not Test' method."

The New England's "LAN Administrator Course" features a "gas gauge" that shows how far the student has progressed through the course, an important psychological boost. Colletti is also careful to use a uniform glossary throughout all the training.

In the future, perhaps when the economy improves enough to loosen up the budget, Colletti hopes to implement digital video and video mail on a network and to hire an on-staff artist to create high-quality original animation. In the meantime, Colletti will continue to "work with what we've got and do the best we can."

With limited resources, she has shown that a good imagination is still the key to success with technology.

Computer Museum Opens New \$1 Million Exhibit



The Computer Museum's David Greschler, exhibit developer (left), and Dr. Oliver Strimpel, executive director (right), flank an enthralled freelance journalist at a recent Virtual Reality weekend presented by the museum.

In the old days, salespeople had to wade through an inch-and-a-half-thick manual to learn about The New England's "Universal Life" product. "It took them 20 hours to read it and

Boston's Computer Museum will open a new exhibit on June 13, designed to show the remarkable versatility of the personal computer. Called "Tools & Toys: The Amazing Personal

Computer," the million-dollar exhibit will illustrate the leading edge of tomorrow's applications.

More than 75 percent of the interactive programs to be showcased are now commercially available. Video production, graphics, music, multimedia, simulations and groupware are included on more than 35 interactive stations that will be available to visitors, said Exhibit Developer David Greschler.

"The highly interactive exhibit shows the versatility of this remarkable machine for people's work, play, learning and communication," Greschler notes.

Financial supporters for the exhibit include Bill Gates, the Kapor Family Foundation, Steve Wozniak, Apple Computer, and Digital Equipment Corp. For more information on the Tools & Toys exhibit, call the Museum at 617/426-2800.

Pen Computing: A Whole New World

"The pen computer will become the most pervasive computing device ever," projects Dr. Portia Isaacson, president of DreamIT, Inc. (Cambridge,

"The pen computer will become the most pervasive computing device ever."

Mass.), publisher of *Pen-PC Reference Report*. "In just 10 years, the design center for computer systems will have shifted from the desktop to the mobile computing model, and that will change everything."

In a recent keynote speech presented at Digital Consulting, Inc.'s (Andover, Mass.) Pen-Based Computing Conference in Boston, Isaacson predicted that we are on the threshold of another burst of creativity such as "we haven't seen in years in the computer industry," thanks to the advent of the pen computer.

Isaacson also predicted that in 20 years, there will probably be no computer keyboards in use. "The pen is two orders of magnitude better than the mouse, which I love," she says. By 2005, paper usage will decline for memos, faxes, and report writing because there will be a new type of treeless paper — self-filing, elastic, talking "Smart Paper."

On that Smart Paper will be written

electronic ink, a new type of computer data. Electronic ink can be recognized as characters, numbers, punctuation or other keyboard-enterable data, or as handwritten signatures, shapes, mathematical symbols, and "gestures," a form of shorthand for entering commands to the software program.

The biggest applications for pen computing, Isaacson believes, will be drawing, CAD, presentation graphics, note taking and writing drafts, editing, per-

sonal information managers, filling in forms, and building spreadsheets. "Pens that write on the screen with electronic ink will enable walk-around and sit-around computing with computers that range from Daytimer to wallboard size," she foresees.

Isaacson noted there is presently a "big opportunity" for machines that are hybrids, with keyboards and pen modules, that work well with either input device and let the user change modes.

As the microprocessor enabled the advent of PCs, so will the "very fortunate accident" of fax and portable communications enable pen technology, Isaacson feels.

Acknowledging that pen computing is suffering from the labor pains associated with the birth of any new technology, Isaacson advised potential users to be patient while waiting out the current supply problem.

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FROM PREVIOUS PAGE

Observing that portables are the highest growth product segment today, Isaacson concluded, "The market has voted for personal control and freedom. Never have customers been so ready to buy computers that do not yet exist for both enterprise applications and personal productivity applications."

"There's never been an opportunity like this for manufacturers and there may never be one again for a long time," Isaacson observed.

BCS Welcomes New President

At long last, the search for a new president of the Boston Computer Society (BCS) is over. By the time you read this, Robert Grenoble will already be at the helm of the world's largest PC user group.

Grenoble has 20 years of experience managing a diversity of associations. "They were all membership oriented

and member service oriented," Grenoble explains. "The BCS is different in that it's more localized than the others I've managed. Other than that, it's pretty basically the same as managing a corporation or a small business."

In the BCS, Grenoble inherits a once-thriving entity now feeling the effects of falling membership numbers. "The BCS has lacked leadership for a while, as far as having a CEO," he notes, "so they need somebody to coordinate it, pull it together and put more emphasis

on the services.

"One of the things that has always been my strong suit is running a very conscientious member service organization. I really promote customer service and I look at members as being customers."

Perhaps his greatest challenge will be rebuilding the confidence of the BCS's 25,000 members, who he says have lost faith in the organization's ability to provide services. "I think the BCS does a lot of services, but right now they just do them to get them out, and don't necessarily concentrate on the content and the quality as much as they need to," he notes.

How will Grenoble go about changing that? "You have to work with the members, the customers, to find out what services they really want, and then provide the best services possible," he says.

If anyone can do that, it's probably Grenoble, judging from his track record. "All the associations I've managed over the last 20 years have been in trouble, and were losing mem-

"You have to work with the members, the customers, to find out what services they really want."

bers. They needed help and leadership." Grenoble turned every one of them around.

Although most of his experience has been outside the computer industry, Grenoble did take over the helm of the Hewlett-Packard user group, Interex, said to be the world's largest independent user organization. At Interex, Grenoble turned a \$300,000 deficit in to a \$1 million profit and doubled the membership.

A former teacher and coach, Grenoble says he is "people oriented." He most recently ran his own business, a market and deli in West Linn, Oregon. "What I'll miss most are the close relationships I had with my customers," he says. Hopefully, he will find a similar warmth here in Boston.

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Feisty PCs Compleat

Firm Wants To Change The Way We Buy PCs

By Marguerite Zientara



Marlborough-based PCs Compleat's President & CEO Gordon Hoffstein, Vice President Operations William Brown and Vice President Sales Jack Littman-Quinn, (left to right)

"Hi, this is Gordon. How may I help you?" If you were to call a nationwide mail-order marketer of PCs, you might well expect to hear such a greeting at the other end of the phone line. You would not, however, expect "Gordon" to be the company's president and CEO.

But at PCs Compleat, a different breed of marketer based in Marlborough, Mass., you could easily find yourself discussing your computing needs with the company's president, Gordon Hoffstein, or others on the roster of top company executives. The only thing is, you might never realize it.

"If you were to call in between 6-9 in the evening, it's likely you would get me," says Hoffstein, who rotates with other top managers to spend about one evening a week at the phones. "Answering the phones helps us understand our customer, helps us see what our telesales people deal with, helps us refine our message to the customer, and it's an awful lot of fun. That's really where the action is, being on the phones."

Such close involvement with customers is one of several characteristics that combine to make PCs Compleat unique in the industry. Differentiating itself from distributors, mail-order firms, direct marketers and value-added resellers (VARs), PCs Compleat has taken some of the best aspects of each and rolled them into one very attractive package.

Offering the Best of Several Worlds

Calling itself a "super direct" source for PCs, PCs Compleat offers customized "plug and play" systems, at lowest-guaranteed prices, from a handful of leading IBM-compatible vendors: Everex, Leading Edge, Packard Bell, Texas Instruments and Toshiba. The company also offers a broad variety of software, peripherals and accessories, in an effort to provide "one-stop shopping" for customers.

PCs Compleat offers customers toll-free ordering from 9 a.m. to 9 p.m. Monday through Friday; lifetime, toll-free technical support; one year of third-party on-site service; and shipment of orders within 24 hours (48 hours for customized systems). After all that, if you just don't like the system you bought, you can take advantage of the company's 30-day unconditional money-back guarantee.

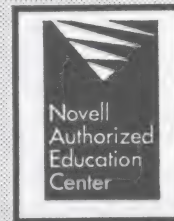
Based on that description, you may agree with PCs Compleat when it says it combines "the choices of superstores with the value and convenience of direct marketers."

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What PCs Compleat offers that traditional mail-order houses don't is a knowledgeable staff and lots of pre- and post-sale support. Direct marketers like Dell, Gateway and Zeos are also strong in the support area, but you can buy only one brand, their own, from them.

PCs Compleat, on the other hand, offers several brands and has the expertise to mix and match compatible software, memory and peripherals to create a complete, customized pack-

age that's ready to plug and play when it arrives at your home or office.

Although superstores and mass merchants offer a seemingly infinite variety of equipment and brands, they lack two key elements that PCs Compleat offers. First, PCs Compleat's sales and support staffs have immediate access to a vast database of technical information and, second, PCs Compleat delivers software-loaded, ready-to-go systems right to your door.

"Why anyone would want to get in their car, with all the traffic, go to the

superstore, get the boxes into their car, carry them into the house and put all the pieces together, is beyond me," Hoffstein says. "We can offer them a similar price, good pre-sale support, post-sale support, plug it in and away you go."

So, What's the Catch?

There is one slight caveat. PCs Compleat really doesn't want you as a customer if you're a complete novice at computing. If you're a small- to

medium-sized business on your second or third PC, however, your credit card (they take them all) is more than welcome.

The company, which opened its phone lines on January 20, learned the hard way that not every sale is a good sale. "The first buyers we attracted were people who'd never used a computer before," Hoffstein explains. "They were very inexperienced. They took a lot of time on the phone, and they ended up returning equipment after they bought it.

"It kept us busy," he says, "but it really wasn't the buyer, long term, that we wanted, and that wasn't why we started the company." To turn that situation around, PCs Compleat has refocused its advertising campaign. The company also tells certain callers outright that they shouldn't be buying from PCs Compleat.

"We do discourage people from buying from us," Hoffstein acknowledges. "A perfect example was a young woman who called and said she wanted to automate her maid service. She had never used a computer and she didn't even know what software was. This person actually had a book-keeping problem, but she thought buying a computer would solve all her problems."

PCs Compleat steered that customer to a VAR. "What she needed was an answer, not a computer," Hoffstein notes. "VARs sell solutions; we sell computers. The computer-buying public has maybe been sold this bill of goods that computers are all exactly the same, that they're really easy to use — just buy it and you're happy!"

"You and I both know that isn't true," he notes. "You have to know a lot about the computer, and it's actually more demanding than a manual system. I usually tell every customer I sell to that they're going to hate me for 30 days, just from all the frustrations of having a new system."

Microamerica's Top Execs Come Back for an Encore

PCs Compleat has three co-founders, an executive team that in 1979 created Microamerica, Inc., which grew to become one of the largest PC distributors in the world, with \$525 million in sales in 1989. That year, Microamerica merged with Softsel, Inc. to become Merisel, Inc.

Formerly at the helm of Microamerica—and now steering PCs Compleat—are President and CEO Hoffstein; Jack Littman-Quinn, vice president, sales (who actually came up with the concept for PCs Compleat);

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and William Brown, who is vice president, operations.

At Microamerica, Brown created an MIS organization whose systems became well known for their computer-aided selling, computer-aided marketing, networking and integrated logistics capabilities. At PCs Compleat, Brown has designed a similar, but more efficient, system that he believes may be unique in the direct marketing universe.

"We've chosen an architecture that allows us to combine shrink-wrapped personal productivity applications on our employees' desktops with a mini-computer-based logistics and distribution system," Brown explains.

The mini in question is a Digital Equipment Corp. (DEC) VAX 4300 with three gigabytes of storage. Thirty 386 PCs — which are tied together using DEC's Pathworks network — run such Windows applications as Microsoft Word, CC:Mail and faxing utilities.

The Key to Success: A Killer Database

"One of the things [the computer system] allows our sales representatives to do is instantaneous online comparisons of system attributes and product attributes," Brown explains. "Then, when they have the pertinent information up on their screens, they can fax those specifications right from their desktop to the customer and review them while the customer has them in hand."

Sales people do not have piles of manuals or scribbled notes all over their desks; everything is online. "The high point is that, because the technology changes so quickly and manuals quickly go out of date, we've put it all online so that we can keep it fresh," Brown says.

PCs Compleat's online system will also determine the success or failure of the company's toll-free lifetime support strategy, observers say. The obvious question is, how can PCs Compleat afford to offer free LIFE-TIME support?

"By having a damn good database so that a support call takes only a few minutes and gets right to the heart of the matter, that's how," suggests Seymour Merrin, publisher of *The Channelmaker Letter* (Palo Alto, Calif.). "If they don't have a great database that their support line can work off of, it'll be a total disaster."

One of Hoffstein's previous research projects revealed the fact that the typical user makes 80% of his or her support calls in the first 35 days of ownership, after which time the calls drop off "fairly dramatically," he says.

"Some people say we can't afford lifetime support, but I think they're wrong. I think we can," Hoffstein says. "Obviously, we'll have people calling back after a period of time, but it's a good way to get back in contact with the customer. By that time, they may be ready to purchase something else, so there's something positive to it as well."

Keeping the Company Efficient... And Fun

Keeping costs down also contributes to the feasibility of lifetime support. "Economically it works as long as we don't put money into things we don't need," Hoffstein says. "We don't have an expensive store, we have a single location for everything, and we don't need sales offices around the country. We have a single sales office here."

"You won't ever see marble or brass when you come in the front. It's always economical because the computer business is a very competitive business and you have to be very efficient, low-cost, productive and effective. That's what we're trying to do."

Keeping costs down and morale up may be the secret of PCs Compleat's success, if keeping employees happy is important. One of the two (shared) administrative assistants at the company also serves as Chief Cultural Officer.

"She makes sure we're having fun," Hoffstein explains. "If morale is dragging a little, she'll let me know it's time for a pizza party, or a hat day, or a baby photo contest — something to keep it light and to have fun along with working very hard."

Future Plans

If all goes well, PCs Compleat is looking at a few more possibilities, including international expansion, setting up a 900 number for non-customer support, taking in used computers from buyers, and expanding its product line into pen-based systems and high-end workstations.

But will it all go well? "[PCs Compleat] is a kind of business that someone really has to know what they're doing to be in," observes Seymour Merrin. "The marketplace is so large and so diverse that there are many opportunities for many entrepreneurs to make money selling products in a number of different ways, and this happens to be one of the ways it appears will be successful."

Being run by a crack management team who easily rounded up \$5 million in venture capital last fall in a matter of 45 days can't hurt, either. "Gordon Hoffstein is a Class-A executive and operations guy," Merrin says. "He knows how to effectively run an organization, which is required to do that kind of business. He's one of the people I'd put my money on, as a person."

PCs Compleat hopes Merrin is right about this one. "We want to be the largest direct marketer of name-brand computer systems, bar none," Hoffstein says. As he himself observes, "Time will tell."

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NEWS & INDUSTRY BOSTON COMPUTER NEWS

By Marguerite Zientara

MECA Software Announces New Version of One-Write Plus; Cuts Prices on Product Line

MECA Software, Inc. (Fairfield, Conn.), which finalized its acquisition of Great American Software (Nashua, N.H.) in January, has announced an upgrade to Great American's flagship product, One-Write Plus. MECA also announced price cuts for the One-Write Plus line.

One-Write Plus Version 3.0's enriched feature set now includes Detail General Ledger, Comparative Income Statements, Variable Monthly Budgeting, Combined Check Register, and On-the-Fly Account Set Up.

One-Write Plus Accounting is the core of the One-Write family of small business accounting and financial software, which also includes One-Write Plus Payroll and One-Write Plus Ac-

counting Works.

For current One-Write Plus users, the version 3.0 Accounting Upgrade costs \$69.95. Members of the annual One-Write Plus Support Plan, The Works, pay \$39.95. For new buyers, the following are reduced prices: One-Write Plus Accounting, \$129.95; One-Write Plus Accounting Works, \$199.95; and One-Write Plus Payroll, \$69.95.

One-Write Plus version 3.0 requires an IBM-compatible computer with 640K RAM running under MS-DOS or PC-DOS, version 3.1 or higher. An IBM-compatible printer is also required. MECA Software is located at 55 Walls Drive, Fairfield, CT 06430. Telephone 203/256-5000 or 800/288-MECA (6322).

BCS Employment Services Formed

The Boston Computer Society (BCS) user group (Cambridge, Mass.) and Corico Corp. (Salem, N.H.), said to be New England's largest full-service staffing organization, have jointly announced the creation of BCS Employment Services (BCSES).

An innovative public/private partnership, BCSES serves the 25,000 members of the BCS with a tailored benefit — direct access to contract or permanent employment in the high-technology sector.

At the same time, BCSES provides a centralized means for BCS Corporate Members and other companies in the computer and communications sector to more easily locate and employ experts from within the BCS membership.

BCSES offers four basic services to BCS members: Contract Employment, Permanent Employment, Payroll/Accounts Receivables, and Employment Counseling. Individual members can search the BCSES database for both contract and permanent positions, and members can elect to have BCSES assume the Payroll/Accounts Receivable function associated with contract employment.

BCSES will also draw on the experience of Corico Corp. to provide employment counseling for job seekers, in the form of client workshops and seminars, with one-to-one counseling available on interviewing, resumes and other issues members may request.

For more information, call the BCS at 617/252-0600 or Corico Corp. at 603/893-6776.

Braille Translator Works With WordPerfect Documents

Duxbury Systems, Inc. (Littleton, Mass.) has introduced The Duxbury Braille Translator for WordPerfect 5.0 and 5.1 (DUXWP). DUXWP is a fully automated, menu-driven braille translation and formatting software package designed to work directly on WordPerfect documents.

DUXWP can help users comply with the newly enacted Americans with Disabilities Act, which mandates that all barriers preventing disabled people from actively participating in the workplace be removed.

Specifically, DUXWP can help remove the barrier created by the lack of braille materials such as books, newspapers, magazines, office memos, restaurant menus, loan applications, utility bills, and other documents normally only available in print.

DUXWP features a menu-driven interface with mouse compatibility, drivers for all popular braille embossers on the market, and simulated braille printing on many ordinary printers, including HP LaserJet, Epson 9-pin, and PostScript.

The software also features flexibility in formatting styles, compatibility with adaptive devices used by visually impaired computer operators, and the capacity to deal with more complicated user inputs such as computer notation and foreign languages.

DUXWP costs \$295 from Duxbury Systems, 435 King Street, P.O. Box 1504, Littleton, MA 01460. Telephone 508/486-9766.

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Ergo Unveils 33MHz 486DX NoteBrick Computer

Ergo Computing, Inc. (Peabody, Mass.) has introduced an 8.7-pound 33MHz 486DX notebook that can be configured with 4-, 8- or 16MB of RAM, and is reportedly fully compatible with the MS-DOS, UNIX and OS/2 operating systems.

The NoteBrick offers a 120MB or 170MB 19ms hard disk and 3 1/2-inch 1.44MB floppy disk; a 9-inch backlit LCD display with 32 gray scale capability; 84-key full-travel keyboard; external numeric keypad; and external color VGA monitor support. The unit is said to be suited for such demanding applications as Windows packages, desktop publishing and computer-aided design.

An optional portable expansion module (\$295) accommodates two ISA 16-bit half-length cards, allowing a user to add a high-resolution graphics adapter, network card, SCSI adapter or high-speed fax/modem card.

Featuring both power management and quick battery replacement and recharge time, the NoteBrick can operate continuously for about two hours on one external NiCad battery. A battery reportedly can be recharged in two hours, even while the system is operating. An additional battery costs \$179.

For a NoteBrick with 33MHz 486, 4MB RAM and 170MB hard disk, the price is \$3,695. All systems come with MS-DOS 5.0, Windows 3.1, a Logitech mouse and SuperStor. Ergo is located at One Intercontinental Way, Peabody, MA 01960. Telephone 508/535-7510 or 800/633-1925.

\$595 Digitizer Add-On Kit Transforms Notebook Computer Into Pen Convertible

Arthur Dent Associates, Inc. (Tewksbury, Mass.) has announced its first product, WriteAway!, a transparent digitizer add-on kit that transforms a notebook computer into a pen convertible. User installation consists of four steps and reportedly requires no special tools, skills or knowledge.

Priced at \$595, WriteAway! includes a digitizer (made by Scriptel Corp.) that fits over a notebook's screen, a tethered pen and a pen controller card that plugs into the notebook's modem slot. With WriteAway! installed, users can run the Microsoft Windows for Pen Computing operating system in both landscape mode and portrait mode.

WriteAway will first be available as an add-on kit for the Zeos Notebook 386+, a 386SX/20MHz machine with 640x480 VGA support and a backlit LCD display with 32 shades of gray. Additional notebooks will be supported in the future.

Arthur Dent Associates (named after the main character in *The Hitchhiker's Guide to the Galaxy*) was started in November 1991 by eight former Wang employees who ran Wang's pen computer group. At Wang, the group developed The Guide (a name also derived from *The Hitchhiker's Guide*), a 386SX-based pen tablet that was never released.

Arthur Dent Associates is located at 500 Clark Road, Tewksbury, MA 01876. Telephone 508/858-3742.

Intelligent Correspondence Manager Available for WordPerfect

The Utley-Cross Co. (Maynard, Mass.) has announced software said to automate WordPerfect correspondence management and retrieval under DOS and Microsoft Windows. The Utley-Cross Correspondence Manager — intended for users whose directories contain letters, memos and e-mail — is said to organize the correspondence and create a name/address book, a catalog of summaries, and category indexes.

The user interface is said to present key categories automatically pulled out of the user's files, and requires no typing. The key categories include: proper names, author, typist, date, addressee, street, state, town, country, zip code, phone number, copies, headings, memo headers, document type, and document format (WordPerfect, ASCII, and others).

Users do not have to manually create document descriptions, profiles or summaries. The Utley-Cross Correspondence Manager is said to locate all WordPerfect correspondence on a hard

disk and to allow users to retrieve it quickly by selecting their own categories, rather than having to remember DOS filenames.

The Correspondence Manager automatically organizes the clutter of a disjointed collection of correspondence, and lets users pull a file from a vague time period using incomplete information. A system for disk housekeeping chores is included to back up and eliminate unwanted files, while keeping a catalog of concise document summaries for permanent reference.

The software runs as a truly graphical GUI under DOS or MS Windows, requires an IBM PC or compatible, 286 CPU or better, DOS 2.1 or higher, hard disk and 640K of RAM. 3MB of RAM is needed for Windows. The Utley-Cross Correspondence Manager supports WordPerfect 5.x for DOS or Windows, and costs \$89.

Utley-Cross Co. is at 56A Main Street S-130, Maynard, MA 01754. Telephone 508/263-0386.

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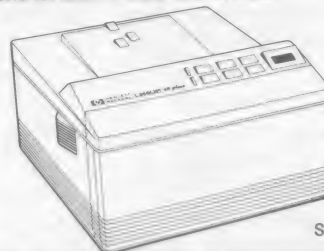
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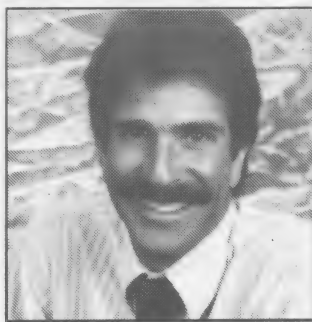


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By Rick Altman

Multimedia

A New Face on Publishing?

With all of the hype and misdirection surrounding computing's newest buzzword, it's no wonder that most people don't really understand "multimedia." For example, I recently walked into a computer store and saw a PC labeled as a "multimedia computer" simply because it has a SuperVGA display. Another store pitches its "Multimedia PowerKit," which is nothing more than a 386SX with a slow internal CD-ROM drive.

It's not easy to discuss a new technology's contribution to a niche market like electronic publishing when so few PC users have a handle on the

technology itself. Multimedia is one of a handful of new ideas that has the potential to change the way we approach electronic publishing. Many of you have heard the term "paperless publishing" before; join me here on a little stroll down Theory Lane.

The first point to be made is this: Thanks to Windows, Adobe Type Manager, TrueType, and high-resolution displays, we electronic publishers can achieve an unprecedented degree of realism on our computer screens. In

many cases, we can get a very clear picture of our document without making even one test print. We can actually produce and present a document on-screen without ever printing it. This is the essence of desktop presentation software like Harvard Graphics and Lotus Freelance. Soon, it could also be the domain of CorelDraw, PageMaker, and Ventura Publisher.

The two critical pieces to this puzzle are: 1) producing documents that are completely portable, including graphics and typefaces, and 2) being able to embed and then retrieve parts of the document that could include more than just static words or pictures, but sound and movement. That is where the multimedia part comes in, and the scenario might go something like this:

You sit down in front of PageMaker or Ventura to produce a document destined to be read by all 150 people in your department. You know that they all use Windows 3.1. This becomes valuable information as it means you can rely on key components of object linking and embedding (OLE) and on TrueType's ability to embed typeface information directly into a document. You won't need to worry whether your readers have your typeface in their systems — just that they can enable TrueType under Windows.

On page 2 of your document, you have important statistics concerning an upcoming event — too involved, you determine, for a simple chart. Instead, you create an icon that simply reads "Double-click here for more information." Said double-click promptly launches Excel and an embedded sound file. As the chart is displayed, audible instructions prompt your reader as to the variables to change to assess the situation at hand. Once again, TrueType technology assures that all text will be exactly as you prescribe it.

When done, your reader exits Excel and returns to the PageMaker or Ventura document. Two pages later, he encounters a complex table of rules and regulations concerning the event. Not wanting to bore your readers with

excess detail, you list only the main topics in this table. The details, for those who want to see them, are available as an embedded database. Anyone wishing to view the database need only double-click at the right spot.

These scenarios require that your readers have access to the same OLE-server applications that you used — in this case, Excel and an unnamed database program. Having met that requirement, your multimedia "publications" can virtually come alive. Instead of trying to describe what Michael Jordan looks like during one of his flying dunks, you could embed a recorded visual image of it, tongue flapping and all. (I wonder how long it will take until literary critics point to multimedia as a leading cause of the demise of the written word. They might be right...)

Conventional publishing is unable to approach the presentation potential that multimedia and OLE offer. With each new Windows application that gets into the act, the opportunity increases for sharing data — whether written, spoken, or seen. Companies like Corel and Micrografx, two leaders in graphics software, already have plans to offer an all-in-one graphics station for users making presentations or preparing business communiqués. Imagine how effective your messages could be if you could count on common software being used by your recipients. You could prepare the message in a presentation module, link to charts produced in another module, use sound and motion as supplied by Windows multimedia resources, and full-color drawings produced by a drawing module. All your readers would have to do is click here and there. Sounds like a commercial being made — bring on the yuppies in their cool business suits.

This walk down Theory Lane is not too far off in the future. In fact, I'll make the following prediction: By the end of the summer, I'll write about this again. Only I won't report on how this type of publishing could be done, I'll report on how it is currently being done.

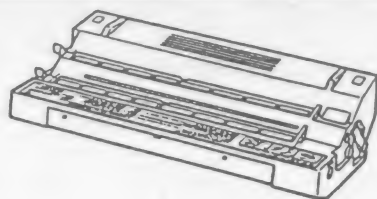
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Rick Altman has authored books on Ventura Publisher, PageMaker, CorelDraw, Harvard Graphics and Desqview. You can write to Rick on CompuServe at 72341,1714, or via fax at 408/252-5451.

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DEALER SPOTLIGHT

Interviewed by Marguerite Zientara

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Left to right: Carol Cappadona, Don Sommers and Lance Saltzman

Are you looking for Unitech? If you're one of the many former customers of Unitech Computer Centers, a four-store local chain that went out of business last fall, you'll be happy to know about Computer Connections, off Route 128 in Westwood. Started last November by three former Unitech employees, Computer Connections is one of several Unitech spinoffs, and the closest in "look-and-feel" to the original.

Not only does Computer Connections try to duplicate for new customers the high level of service and support that Unitech offered, but it also services all systems that were sold by Unitech. "Unitech's concept was unique and very successful," says Computer Connections General Manager Carol Cappadona. "We just enhanced it by accepting trade-ins, selling used parts, and offering a larger library of shareware."

We spoke recently with Carol and her two partners, Lance Saltzman and Don Sommers.

You say that you offer a high level of service and support. How does your approach differ from that of other computer retailers?

I think it's just the patience and the

time that we spend with people, whether it be a new user or an experienced user, where we give that extra effort. If someone calls up with a problem, we'll walk them through it. We'll spend an hour or more if we have to. Just for an example, I sold a system to a brand new user this morning. I brought him back to the service area, showed him the system setup, and answered numerous questions he had about some software applications.

Also, we don't have an hourly rate for service. We have a flat rate for each specific repair. For example, to replace a floppy drive in a system, we charge \$30 [plus the drive]. It doesn't matter how long it takes, we charge a flat \$30 for labor. We have a large sign at our service center with all installation and repair prices visible so customers know

what it costs before they leave their computers with us. There are special situations that don't apply, but in those cases we'll look at the computer and give the customer a price on the job before any work is performed.

Besides service and support, what would you say differentiates you from the competition?

I think it's the fact that trade-ins are considered and we do a lot of low-cost upgrades. We'll try to upgrade any IBM-compatible machine for a lot less money than it costs to buy a new system. I know there are a lot of people out there who have computers that need to be upgraded and are looking for solutions.

Someone who has a 286 machine needs only to upgrade the motherboard and can still keep most of the original parts. They can also trade in the motherboard or the entire computer. We like to give every option available to the customer and let them decide.

What trends can you identify, based on your experience with customers?

CD-ROMs are still the trend and a

very hot seller right now. Prices seem to be coming down. We sell some CD-ROM titles now but we're looking to get into that area in a big way in the next few months.

And sound cards are very popular. Multimedia is the buzzword, even though it means different things to different people. To us, it means basically sight and sound together. With the sound card, if you're playing some games or software applications that can give you sound, it's even more exciting.

Are you going to specialize in multimedia?

Multimedia is just one specialty. We try to carry as many components as it takes to build full computer systems. Our product line expands frequently due partially to the industry, and largely because of requests from our customers. Through such requests, we can see where the market is going, and we're not locked into carrying just the X, Y or Z product. Innovation benefits everyone because it generates interest with our customers and creates excitement for us.



By Michael Dortch

Multimedia, Your Networks And More

Multimedia offers many important benefits and advances to computer users willing to withstand the slings and arrows of the evolution of a young technology or set of technologies. These potential benefits and problems are magnified exponentially when the discussion moves from a PC to a network.

Multimedia software, with support from CD-ROM drives, high-resolution graphics, CD-quality sound and other elements, can allow PC and network users to do things that are simply impossible without them. Imagine electronic-mail that incorporates animated graphs, live video demonstrations of prototypes, or even real-time videoconferencing on your PC screen, and you begin to see the promise.

However, there are several important obstacles between here and a multimedia Nirvana. A few of these are highlighted below.

Expense. CD-ROM drives are still too expensive, and their ability to be shared on a network too limited. This will change, but hasn't yet.

Inequality. Multimedia is basically inaccessible to users of older, less powerful PCs and/or operating environments. If you don't use the latest version of Microsoft Corp.'s Windows or Apple Computer Inc.'s Macintosh operating system, or the highest-resolution color graphics, the odds are better than even that you'll never gain full access to multimedia's promise, no matter what these vendors or third-party developers say.

Lack of Bandwidth. It's not rocket science to realize that zipping mini-movies across a department or continent is going to require wider electronic pipes than the ones we use to send today's files and messages. However, despite the promise of a plethora of technologies, up through the much-touted integrated services digital network (ISDN), most local and wide-area network "plumbing" is just not yet up to the demands multimedia networks are likely to create.

Lack of Applications. Owing in part to all of the above, there just aren't any multimedia applications that have made large numbers of users demand multimedia on their networks. Network applications are starting to sport multimedia "support" or "hooks" to

varying degrees, but very few developers have anything substantive to show or discuss yet — save for multimedia electronic-mail.

Lack of Vision. This is basically a combination of the lack of adequate network infrastructure and the lack of demand-spurring applications, coupled with many users' and industry observers' lack of ability to take a perceptual "great leap forward." Eventually, some key network users will just take the leap, and validate the concept of multimedia on networks, just as early adopters validated LANs themselves. However, none are rushing forward just yet.

Despite these impediments, the horizon is not uniformly bleak for multimedia on networks. Novell Inc. is working with Eastman Kodak Corp. to reduce the bandwidth requirements of imaging on networks. These developments will be easily applicable to other bandwidth-hungry, non-structured forms of information, including sound and video, according to officials from both companies I interviewed recently.

Development of new technologies to deliver greater bandwidth is also proceeding apace. Vendors are already delivering implementations of the 100-megabit-per-second fiber distributed data interface (FDDI) over copper wire, which is a lot less expensive and easier to install than optical fiber. However, there are conflicting approaches to FDDI over copper competing for widespread industry acceptance, and prices will have to fall a bit further before this becomes a widely available and affordable alternative to today's bandwidth-constrained LANs.

Telephone companies and other wide-area carriers are also exploring and deploying other high-bandwidth technologies as services with which users can experiment. These include the Asynchronous Transfer Mode (ATM), frame relay, and Switched Multimegabit Data Services (SMDS).



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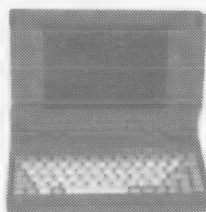
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However, these too are often perceived as competing rather than complementary technologies, and many carriers have yet to work out how much we'll pay to use them, when and where they'll be available, and how to interconnect services from different carriers.

CD-ROM drive and software prices are also starting to fall, even as their quality and features improve. Thus, while multimedia is still most impressive when demonstrated on stand-alone PCs or "information kiosks," the technology is beginning to become more network-aware and network-friendly.

When multimedia becomes more network-practical, we ought to be able to see and say more about it. This should begin happening before year's end — Apple is already exploring ways to create practical multimedia servers for networks, based on its Macintosh operating system, QuickTime graphics manipulation software and network-savvy technical resources.

In Other News: A Small Network Update

PC and software vendors are telling us we have to upgrade to be fully future-compatible. In a similar vein, vendors of network operating systems — the software that turns connected PCs into actual networks and runs network applications — seem pretty adamant that their customers move up or get left behind, too.

Novell has introduced five- and 50-user versions of NetWare version 3.11, which was formerly targeted almost exclusively at larger LANs. The company also raised prices on NetWare v2.x, the versions originally marketed to those with more limited networking needs. Banyan Systems Inc.'s VINES (for Virtual Network System) network operating system, used primarily in large, complex networks, now comes in smaller, more affordable versions as well.

However, not everyone on every small network needs the features found in these and other full-blown, client-server network operating systems. For such users, peer-to-peer network operating systems, which do not require dedicated PCs acting as servers or repositories of shared resources, are often an attractive alternative. Recent developments may make them even more attractive.

Sitka Corp., the Sun Microsystems company that sells the 10Net peer-to-peer network operating system, has announced a new program called "Customer for Life," which lets resellers and distributors earn commissions on enhancements to all 10Net LANs they sell, even if those enhancements are purchased elsewhere.

As part of this program, users who can show proofs of purchase for two network adapter cards can get a two-user version of 10Net for free from any Sitka reseller. A \$299 Expansion Pack allows growth of a 10Net LAN to five users.

Intel Corp., makers of the chips inside most everyone's IBM PCs and

compatibles, has also introduced new software with interesting networking potential. Release 2.0 of the company's iRMX for Windows operating system coexists with DOS or Microsoft's Windows, and includes several built-in peer-to-peer networking features.

Among other things, a PC loaded with this real-time operating system can communicate with real-time applications like the monitoring of manufacturing processes or stock market rates. The software also lets Windows applications communicate with one another over a network via Windows' Dynamic Data Exchange feature. Intel's iRMX for Windows can also let a PC act as a non-dedicated server compatible with Microsoft's LAN Manager network operating system and communicate with networks running Novell's NetWare, among other things.

The bad news: the only adapter with which iRMX for Windows now works costs \$600. The good news: compatibility with almost every widely available and much more affordable LAN adapter is reportedly coming this month, along with support for the Transmission Control Protocol/Internet Protocol suite, which will expand the software's abilities to communicate with other types of networks.

Meanwhile, Microsoft itself is rumored to be readying its own peer-to-peer network operating system, code-named "WinBall." This is particularly interesting, given the company's commitments to its LAN Manager client-server network operating system and publicly stated intentions to build peer-to-peer networking features into Windows and the forthcoming Windows New Technology (or Windows NT) operating system.

So, it looks like the latter half of 1992 ought to see significant progress in two areas important to almost all network users, large and small. Multimedia will either begin delivering on its promise to network users or begin becoming a niche solution. Meanwhile, peer-to-peer networks will gain greater connectivity to users' applications and to organizations' large-scale network solutions. Stay tuned, and stay in touch.

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Michael Dortch is the author of Sybex Inc.'s *The ABCs of Local Area Networks*.

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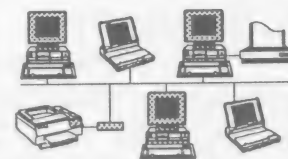
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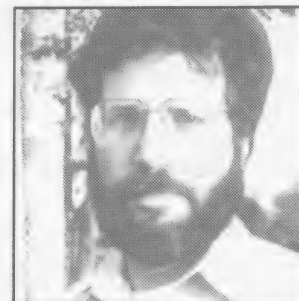
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By Charles Bermant

The State of MPC

In Search of Mainstream Multimedia

When we last looked at the state of the Multimedia Personal Computer (MPC) art late last year, it was in a state of flux. Now, about six months after the grand unveiling, we are seeing some good deals on CD-ROM drives and scattered titles in the local software store. Still, it's hard to say whether MPC is any closer to its stated purpose — to penetrate the consciousness of the average user.

Like any new "standard" there has been a fair amount of backtracking. Users are finding that while the MPC standard is nice, they don't need all that hardware (a high-performance

drive and a special sound card) to take advantage of CD-ROM. Matter of fact, a major difference between MPC and non-MPC software is that the latter is faster.

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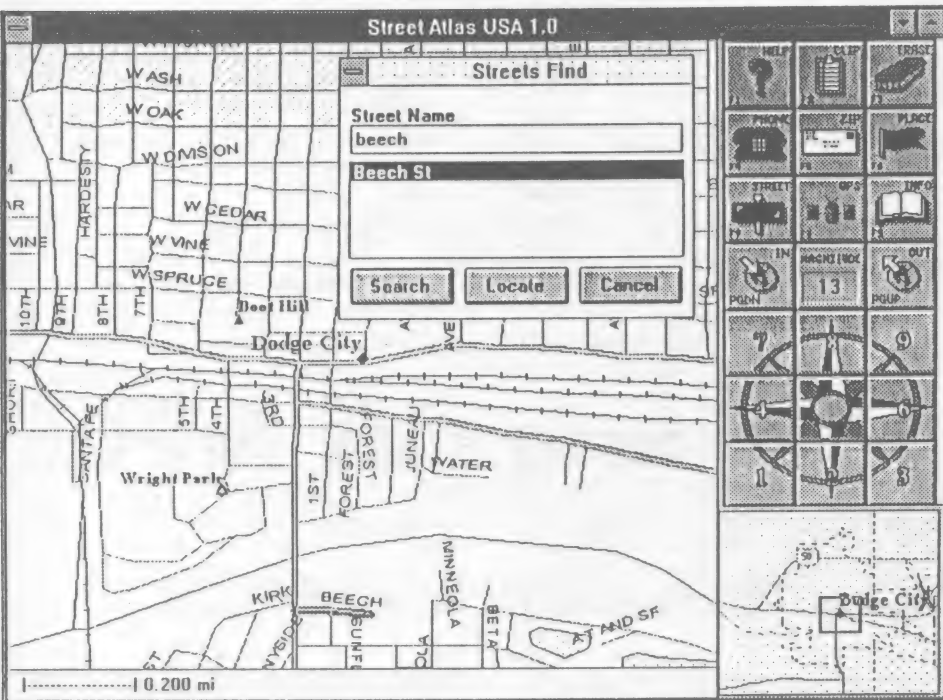
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At MPC's introduction, the entry-level machine was said to be a 12MHz 80286 PC. The public wasn't stupid. They were telling us (let's be kind and attribute it to eagerness and not lying) that a PC that wouldn't even run Windows at any speed would support a standard that placed additional strain on the CPU. Fortunately, few MPCs were sold before the specification was soon upgraded to a 16MHz 386SX. So there aren't a lot of unhappy people

who swallowed this particular — er, dissembling.

Enough, already. I've been running an MPC on my SX for a while, and I can say that it isn't pretty. While I can tell there is a wonderful world of software out there, using this machine is like trying to get there by wagon train. When they say that MPC works on this chip, that's all it means. It works. It's like running Windows with 2MB of

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FROM PREVIOUS PAGE

RAM or OS/2 with 4MB.

I know these people want to sell the equipment and technology at all costs. But it would be nice to go into this investment with your eyes wide open. I'm not an expert — I don't have a large testing lab — but I suspect that you will be frustrated by any machine that runs slower than 25MHz when using MPC. The overhead is just too great. It would be nice to hear from the people with the labs exactly what you need to

make the stuff run well. Imagine how much equipment you could sell if you told the truth... aaah, never mind.

The software is also lagging behind expectations. Going down the list of "available" MPC titles (at least those that looked interesting), I found very few were actually shipping. They blamed God, the weather and, of course, Microsoft for the delays. Most promised their titles would arrive in the "summer." And one vendor, after boasting about his ability to ship prod-

uct, closed our conversation with a brusque "it should be there in a few weeks." A "few weeks" later, it's not here.

In its relative infancy, the MPC software business has taken on aspects of other cultural areas — like rock and roll. While I was calling for demonstration products, some of these folks, if they even deigned to return my calls, made me feel like I was trying to scam free Paul McCartney tickets. Well heck. Just because I was going to have fun

with evaluation software doesn't mean the request isn't legitimate.

Among all of this, I have found five MPC disks that are actually here, usable and — to go out on a bit of a limb — worth owning.

Dr. T's Composer Quest

MPC exists to mix the metaphors; Composer Quest shoves them into the blender and presses puree. A combination game/history lesson/music tutorial, it sends the user on a theoretical trip back in time to gather information about society through its composers. Art, after all, reflects life.

The time covered ranges from the 1600s into the 20th Century. While there are some questions about rock and roll, the music included stops short of



Composer Quest's Composer Menu displays the pertinent composers of a given historical period.

the contemporary due to copyright restrictions. This is no big deal, since everyone knows modern history and rock haven't been around long enough to gather a real perspective.

Composer Quest's sound and graphics are great. It's a fun game that makes you eager to learn, spending hours in

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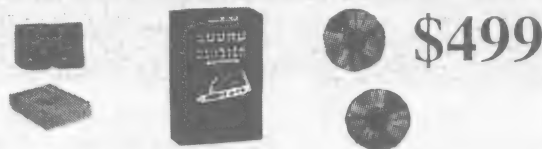
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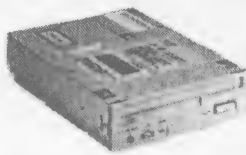
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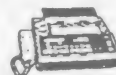
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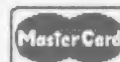


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front of the computer clicking through screens of inconsequential but fascinating information. And if it has this kind of effect on an adult, imagine what it does for a knowledge-hungry kid.

Big Map Attack

Another ingenious product is Street Atlas USA, which has a map of every street of every town in the United States. Really. It's accessible any number of ways — by typing a phone number, zip code, city name or even street name, popping up a detailed map of the area in question.

There probably isn't a person alive who can use this program for more than five minutes without calling up his or her own street corner, or every street they've ever lived on. I've done this, and can say it works. I found no mistakes (not like calling up El Paso in the Ami Pro database and finding out it was in New Mexico), and it's one way to get a new perspective on an area in which you may have lived for years. People tend to think in straight lines, but it takes something like this to perceive the curves.

Street Atlas USA has a map of every street of every town in the United States. Really.

If there is a problem, it isn't with the program itself. Street Atlas USA presents the best argument for powerful hardware. Every time you change orientation (you need to do this several times before finding what you need) it redraws the map. In a crowded area this could take a minute or two each time. So using this program on a slow machine will drive you nuts.

How often you use this program will vary — for many it may not be exactly "productive." Still, this is a new-age reference tool that no one with a drive (at least a fast one) should be without.

Another reference tool that could not exist before Windows comes from E-Book, with its Electronic Art Library Volume 1. This is another abbreviated history lesson, only through the eyes of art. You type in the name of an artist or the title of a painting, and it pops up on the screen faster than you can say "museum."

The history here is cursory, but is good for people who are not art historians but know what they like. The

hardware requirements are a little strict, as you need an SVGA system to see the art in any kind of decent resolution. It's also fairly slow on the display, although not nearly as pokey as Street Atlas USA.

In the immediate pre-PC years, there emerged a brand of reference book that centered upon trivia. The reading public, obviously, had a lot of time to kill. Two of these have found their way into the MPC: The Guinness Book (Disc) of World Records and the Book Of Lists 3. Both test the tolerance limits

with regard to inconsequential knowledge. Both, incidentally, also take the MPC concept just halfway. The Book of Lists has no sound aside from tapes of the author, the wry David Wallechinsky, providing background about the various categories. The Guinness Disc has a few animal noises and acceptance speeches, but doesn't include anything interesting like the world's loudest belch or highest screech. In both cases the discs satisfy our curiosity about the category's potential, but they aren't that much bet-

ter than the books. This only goes to prove that before many innovations can be done correctly they first need to be done halfway.

Whine, whine, whine... These programs are only first steps. Pretty soon the library we have in our PCs will rival the one down the street with regard to form, content and fun.

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Charles Bermant is co-author of *101 Windows Tips + Tricks*, now available from Peach Pit Press.



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October 30, 1990
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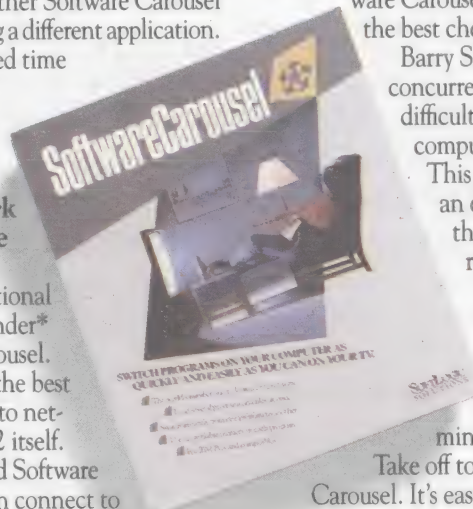
Even the experts agree.

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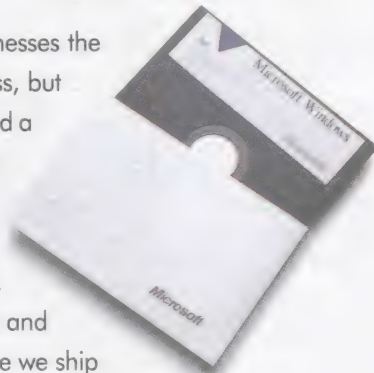
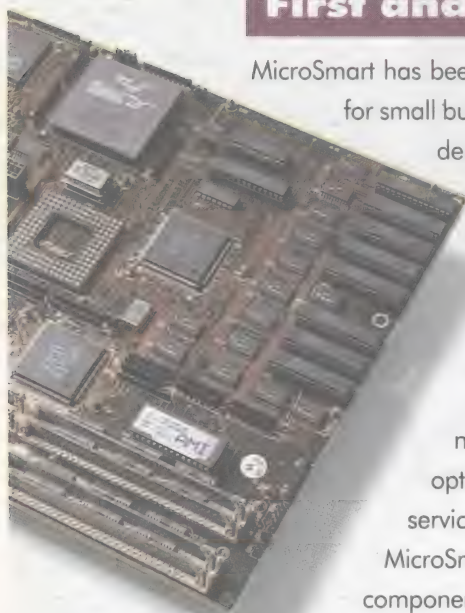
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A computer monitor is the central focus, displaying a vibrant image of a blue sky with white and grey clouds. The monitor is set against a background that is a dense, overlapping field of CD-ROMs, their reflective surfaces creating a shimmering, multi-colored effect. The overall composition suggests a connection between digital storage and multimedia content.

CD-ROM Powers Multimedia Boom

By John McCormick

Is this the year of CD-ROM? Multimedia? I have been asked that question about CD-ROM every year since about 1988 and have always answered perhaps, or not quite yet, but this time an honest answer might be YES. I have covered this field for many years now and the predictions for a doubling of sales each year have been accurate. The appearance of deeply discounted last-generation drives on the market, the arrival of thousands of CD-ROM titles, and the burgeoning promise of multimedia are all causing the market to grow. It's easy to tell what generation a CD-ROM drive belongs to; if it has an access time ranging from 600 milliseconds (0.6 sec.) to just over one second it's not state-of-the-art. Those slower drives are still being built but are not fast enough for many business users or most multimedia applications; nevertheless, they are an excellent deal for many home and some business users. They are slow compared to the latest models but they are still much faster than looking up information in books or a stack of, say, 5,000 magazines. Those slow drives are now showing up for between \$200 and \$400. Current generation drives push access times close to 300ms, which is still mighty slow compared to a 20ms hard drive but fast enough for most uses. The list price of a state-of-the-art CD-ROM drive has hovered around the \$800-\$1,000 mark for about five years as the drives have improved greatly. Recent price cuts have dropped the range to \$500-\$800.

CD-ROM Facts

A CD-ROM is the data version of the music CD and can store nearly 600 megabytes of data. By way of comparison, a book I authored on optical storage, a 150-page hardbound volume, only takes up 0.266 megabytes of space in uncompressed ASCII format. So a single CD-ROM has room for about 1,900 such books and indeed there are titles such as the Library of the Future

About the Cover

The cloud image is from Sky: Volume One, a collection of 100 digitized color sky images, available on CD-ROM disk from CD Folios in Canoga Park, Calif. Phone 800/688-FOTO. Our photographer, Bradley Ream, used some clever photographic tricks to provide us with one complete image (it was not digitally manipulated).

— Kris Warrenburg
Art Director

and Bureau Development's Great Literature Classic Edition which contain hundreds of important novels and other books. A CD-ROM disc usually includes a full-text index as large as the data itself which reduces its capacity, but, still, a fully indexed and cross-referenced multimedia CD-ROM title such as the Grolier Electronic Encyclopedia can carry all the text from 21 printed volumes, 250 maps, thousands of color and black-and-white images, and even the call of a coyote and the cry of a peregrine falcon.

Necessary Equipment

Most CD-ROM discs can be run on a minimum of computer hardware, even an 8088-based machine which provides a 640K memory, but a hard drive is usually recommended or required and a faster machine will speed data access on many discs up to a point. A CD-ROM player will cost from \$200 up, with package deals often bundling good quality drives and thousands of dollars worth of CD-ROM discs at a price well under

SEE NEXT PAGE

A CD-ROM Glossary

A **CD-ROM** (compact disk-read only memory) is an optical data storage disc physically identical to the common CD audio disc. The standard specifies both the size of the disc and the method of data storage. A CD-ROM can contain data, sound, and images, but there are also competing standards such as CD-ROM XA and CD-I which have the same physical dimensions but use different storage protocols. There are also 3 1/2- and 3-inch discs which look like miniature CD-ROMs and are, except that a CD-ROM can, by definition, only be one size. All of these discs and the music CDs are manufactured the same way — a plastic sandwich is created on a large vacuum-forming machine by pressing soft plastic against a metal mold, then coating it with a mirror-like aluminum or even gold coating that follows the same bumps and smooth areas created on the base plastic. The process is completed by overcoating the mirror surface with a tough, clear plastic coat. Until recently this required a gigantic disc pressing or replication facility but now there are recordable discs which can be played back on CD-ROM drives, and some of the recorders themselves only cost about \$6,000. CD-ROM players almost always include CD audio play capabilities. The digital signal picked up by a laser read head is either converted to digital data compatible with a computer or converted into an analog audio signal depending on whether you are playing music or accessing a ZIP code directory.

High-Sierra/ISO 9660 — virtually identical CD-ROM standards.

CD-I (compact disc-interactive) connects directly to a television and is not computer compatible. Philips and Sony developed CD-I. Philips launched a \$1,000 CD-I player here in the U.S. last October.

There are about 100 CD-I titles on the market.

CDTV (Commodore Dynamic Total Vision) is Commodore's \$800 version of CD-I but provides for the addition of a keyboard, floppy drive, and mouse.

There are about 100 CDTV titles available now.

CD-ROM XA (extended architecture): The Microsoft, Philips, and Sony standard that includes both graphics (CD-I) and data (CD-ROM) as well as audio on the same discs. XA players read CD-ROM discs but CD-ROM players would require modification or new adapter cards to play CD-ROM XA discs. This standard allows simultaneous access of data and audio on the same track.

There are only about 10 CD-ROM XA titles, most of them available in Europe.

DV-I (digital video interactive) fits up to one hour of video on a CD-ROM. Besides being computer compatible, the major difference between DV-I and CD-I is the amount of full-motion video encoded on the disc. DV-I discs play on standard CD-ROM players with the addition of two video processor chips in a new controller board.

There have been about 10 DV-I titles published.

— John McCormick

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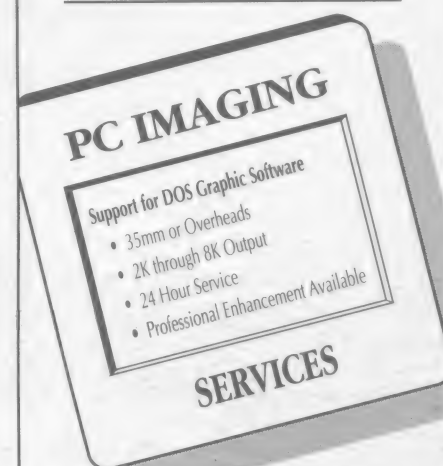
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COVER STORY

FROM PREVIOUS PAGE

\$600. The player needs an interface card (often included in the quoted price) or an existing and compatible SCSI port, along with a software "driver" so the computer will recognize the CD-ROM as a massive, read-only drive.

There are also Macintosh-only and dual Mac/PC titles. Macintosh systems normally require one megabyte of memory and a hard drive is again usually desirable. Access and search times are also limited by the speed of the drives and the massive amount of data which must be searched, so a really fast computer seldom makes a big difference.

Buying Considerations

As with a computer, faster is better, but DAK, the discount mail-order catalog, is now selling an 800ms external PC-compatible drive complete with interface card for only \$200. It also plays music CDs through headphones or through your stereo. For some users this would make a fine first CD-ROM drive, but others will want to invest in a faster drive, especially for multimedia titles. Tandy and other companies offer systems with a CD-ROM drive already built in, and these can be a good deal, but if you buy from a good local dealer or a reputable mail-order firm that offers technical assistance then you should not have much trouble

upgrading your present computer with a CD-ROM drive. One advantage of getting an external unit is that it will be easier to move to another computer later. Those that use caddies offer better protection to discs, but only if you have one caddie for each disc you use; otherwise you are just loading and unloading discs in the carriers instead of directly in the drive. Business users should expect to spend a minimum of \$500 for a good unit that is fast enough for today's multimedia applications.

Multimedia

All multimedia is divided into three parts (apologies to Julius Caesar — my English teachers all said I had a lot of gaul). Small "m" multimedia is a generic term describing any combination of text, sound, and images. Multimedia PC or MPC is Microsoft's vision of the future and the standard specifies a CD-ROM drive, 386SX, 1.44MB floppy drive, 30MB hard drive, 2MB of RAM, digital sound, MIDI interface, Windows, and VGA graphics. Originally the standard called for a minimum of a 10MHz 80286 with 2MB of memory, but then someone noticed that this will barely boot Windows. Lastly comes Ultimedia, IBM's higher, but incompatible, standard which uses CD-ROM XA and DV-I as its basis. Just as you would expect from IBM, the first hardware meeting the specification will

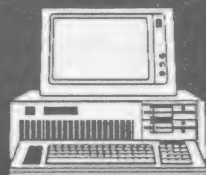
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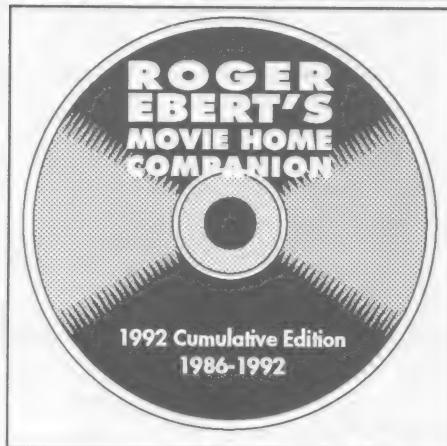
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carry a list price of nearly \$6,000. By way of comparison, at Spring Comdex Tandy was talking about a family of MPC systems starting at only \$2,000 without monitor, and other vendors' MPC upgrade kits for existing 386SXs are going for less than \$1,000. Multimedia PC will let you play back full-motion video with CD-quality sound or even play instruments through the included MIDI interface. It will also let you record your own sounds via the digital interface. Whether all of this sound and fury will signify anything depends not on the excellent hardware but on what titles are published. Paper is a good publishing medium, but it brings us everything

SEE NEXT PAGE

Selected CD-ROM Titles

Most include street prices from The Bureau of Electronic Publishing.

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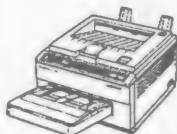


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COVER STORY

FROM PREVIOUS PAGE

from Shakespeare to those "You may already have won" notices in the mail. Some people say that it is so difficult to produce MPC titles that no one would do it carelessly or put out worthless titles. Obviously these people don't own a TV. Fortunately, if the initial crop of MPC software is any sign, there will be a lot of really great titles. Microsoft's Multimedia Beethoven contains the Ninth Symphony complete with score and both English and German text of the Ode to Joy. It's not the same as sitting on the grass of the Boston Esplanade listening to one of Arthur Fiedler's last performances of The 1812 Festival Overture complete with real howitzers, but it is very impressive for a computer and probably a sign of things to come. I have read that it brought tears to some listeners' eyes, but I suspect that they have been too long away from Symphony Hall. In addition to the \$80 Beethoven disc, there are Broderbund's \$50 "Just Grandma and Me" discs (animated storybooks with sound and text) and Voyager Company's AmandaStories, a \$60 CD-ROM that lets children choose animation sequences to create different stories each time. Compton has an impressive \$900 multimedia encyclopedia complete with 15,000 images and a number of animated sequences. Even Microsoft's Book-

shelf reference disc, one of the first mainstream business titles, has added pronunciations to the dictionary. Most MPC titles now are just CD-ROM titles with added sound and some pictures, but many advanced titles are being developed.

Upgrading your present system to MPC is trickier than you might think because the early kits don't have every feature you need for real multimedia. The best bet for now is to buy a fully equipped MPC label system (as powerful as you can afford) or, better yet, wait a bit longer for the second generation of MPC hardware. This is a VERY new game and unless you are a developer you can probably afford to wait a bit for the dust to settle. Few MPC titles are really necessary products as many of the CD-ROM titles are — you just don't need multimedia to do research or prepare mailing lists.

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John McCormick is a member of the Computer Press Association and SIGCAT, the Special Interest Group, CD-ROM Applications and Technology, a user's group based at the U.S. Geological Survey Headquarters in Reston, VA. He is the author of *A Guide to Optical Storage Technology*, which covers CD-ROM and other data storage technologies, and a related book will be out next winter which will include more information on publishing CD-ROMs and take a look at the emerging multimedia field.

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On Rte 1

Personal Contact Managers Blaze New Territory

By Donald Monkerud

If you're like most people, you have business cards stacked in two or three places, phone numbers buried in files, and a Rolodex card file next to the phone, and you still can't find a phone number when you need it.

Now personal contact managers offer a solution to this problem. These desk utilities are entering the mainstream market, replacing hackers' customized address books in programs like HyperCard, 4th Dimension and FileMaker. A covey of specially designed desk accessories can save you time and effort, and provide many added features.

Today's third-generation contact managers offer a variety of phone directories, note and address books, phone dialers, and label, envelope, and address book printers, and they even organize your personal information. And, because these DAs (desk accessories) work as simple databases, they can be used creatively.

How To Organize Your Data

Free-form managers, like Intouch, QuickDEX, or Contact, are the easiest to use; they are like huge drawers into which you throw everything, retrieving only what you need. With over ten pages of note space, a key word will help you recall a contact even if you can't remember a name. You can type information any way you want it organized and you don't have to tab between fields.

Structured managers, like TouchBASE, DynoDex, or Address Book Plus (ABP), are more complicated to use. They require placing information in specific fields and take more time to learn. But they offer more detailed find, select and sort capabilities and can be exported to other databases for use in versatile mail-merge formats.

A structured manager is the best solution for creating different mailing lists or taking a different look at your contact list. DynoDex and ABP are address book applications that contain DAs and therefore have more features and wider capabilities.

No One Size Fits All

While all of these programs offer dialing features and varying print ca-

pabilities, and work as simple personal contact managers, one program may solve your needs better than another. Most of us have multiple criteria with different priorities for each; everyone I interviewed for this article wanted their address managers to do something

more or to provide additional features.

All address managers do a credible job of organizing personal contacts in one place. All strive to create an intuitive interface for immediate use with more complex details explained in the manuals. Personal preference — the look and feel of a product — plays a large and subjective role in choice. With bookstores offering dozens

of sizes, shapes and configurations for their printed address books, why should electronic address books be any different?

Settling On One Way To Organize

Before starting one of these programs consider your basic approach to organizing information. You can save hours of entering all your personal contacts by entering information in a consistent manner as it's used. At some point you'll want to transfer your data to another program, especially if you shift information between free-form and structured managers. You may want to set up personal codes to quickly retrieve information, codes like "TC" for to call or "fup" for follow up, that will allow you to use your address book as a personal organizer.

What's Available

I chose the following address managers because they are specifically designed to organize addresses and phone numbers, they come with DAs, and the most expensive one retails for \$125. High-end personal information managers and multiple-function pro-

grams were excluded.

The six address managers that follow share a number of useful features. Preferences are available for functions like bringing the search field up on opening, tab order for entering data and case-sensitive searches. Commands are easy to locate and you can be entering data within half an hour of loading the program. Note fields vary from 2,056 characters to 14 pages with the ability to time-stamp contacts. Data can be imported and exported in a variety of formats.

Free-form programs sometimes require exporting to a word processor for manipulation before entering the data into a structured database. Printing capabilities vary but provide some means of customizing with fonts and templates and will print to a variety of paper organizer formats. All of the programs will dial through a modem and provide different settings for dialing preferences.

Only Intouch and TouchBASE work on a network. The structured programs can sort using up to our different criteria and have a variety of customizable fields and short-hand keys.

QuickDEX II

QuickDEX was the first small, fast, free-form manager for the Mac. Single index cards are displayed one at a time and information is kept in one field that can include 11 pages of notes. The window is scrollable but not resizable and keyboard commands exist for every operation. Up to eight decks can be opened at one time, easily reached via the menu bar. A 300K application, PrintDEX, sorts and prints files and imports/exports data, and QuickELOPE prints envelopes or labels directly from the DA.

The most frequently mentioned strength of QuickDEX is its speed of finding numbers and its phone dialing

capabilities. Because this is a DA, it's fast, and the only limitation on the number of cards is RAM. One salesman I spoke to had 10,000 cards in one file and could still quickly locate numbers. An overseas trader in San Francisco uses QuickDEX to dial his phone because it stores many exceptions for long distance codes, even pausing for credit card or fax-modem calls.

Intouch

Intouch provides all functions in a point-and-click format with information displayed in two side-by-side windows. The manufacturer suggests keeping names and addresses in one window and phone numbers and notes (up to 14 pages, the most of any DA I looked at) in the second window. While the data windows are small, the notes window zooms larger and displays dial and time-stamp buttons. The modem dials the first number in the second window or any number following the cursor.

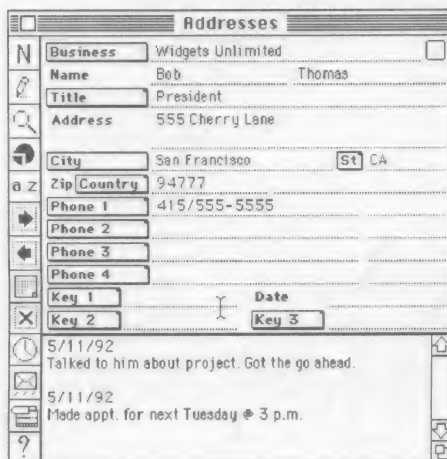
A print preview window displays 15 of the most common sizes of envelopes (with 10 different return addresses); each will accept customized fonts and sizes, including special messages and graphics. FIM and bar codes are automatically printed on the face of the envelope except with the HP DeskWriter which won't print close to the edge. Unfortunately files can only be printed one-at-a-time. Importing and exporting is accomplished with tab-delimited ASCII-text files or a variety of 19 formats including WordPerfect, Excel and Panorama.

The greatest advantages of Intouch are ease of use, storage and retrieval, and fast envelope printing. Printing an envelope from within a word processor can take four or five steps; Intouch accomplishes it — from within any application — with one.

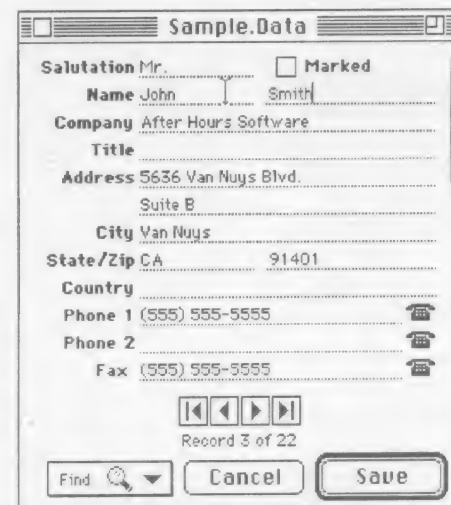
Contact

Designed to be faster and smoother than QuickDEX and Intouch, Contact is a "me too" copy

of these successful products with some extra bells and whistles. In this case, the bells and whistles are literal; Contact supports sound (which means it only works with System 6.07 or later). I'm not sure how I will use sound, but this appears to be the fashion in programs — even word processors are including sound.



DynoDex's entry screen contains functions stacked vertically along the margin of the window; the user merely clicks to perform the particular function.



TouchBase offers two well-organized and uncluttered windows: an overlapping list and a record view. Above is the half-screen version of the record view.

FROM PREVIOUS PAGE

Function buttons are displayed on the individual file cards. While I found the notes limited to two lines in the display window, an option-click opens a larger window to hold more extensive notes. Records can be marked, which allows selecting an otherwise unrelated list of contacts. Dozens of roll and individual label formats can be printed.

TouchBASE

TouchBASE is the only true structured address DA. Two well-organized and uncluttered windows present an overlapping list and a record view. Individual records contain 21 fields with a Rolodex-type card summary appearing in the top right hand corner of each record. Because it's a structured program, information takes longer to enter because you must tab between fields. But if you need to sepa-

of the six programs surveyed. Robin Williams, author of *The Mac Is Not A Typewriter*, wrote the manual. For those going totally electronic, TouchBASE will download to the Sharp Wizard.

DynoDex

Although this DA will display data entered in the application and dial a phone, its real power is as a highly versatile application. An individual record, a list of all fields, and a just-names list can be displayed simulta-

neously. The entry screen contains functions stacked vertically along the margin; the user merely clicks on them.

One of the most comprehensive features of DynoDex is shorthand keys which allow assigning up to 128 keys with pop-up lists; under the city field, type "sa" and San Francisco will appear. Sorts and selections can be based on three levels of criteria and only selected items will appear in the list view.

Double-sided printing is supported with 44 redesigned print formats for labels, envelopes, index cards, and lists.

Portfolio Systems offers Dynopaper, a pre-perforated and drilled paper for personal organizer binders.

A recording mixer at Warner Brothers in West Hollywood has over 100 names of restaurants in a separate file and continually makes additions and prints copies for friends on a weekly basis. DynoDex allows him to list the same restaurant in three different ways under name, type of food, and city. He also keeps separate address books to list computer and travel contacts and prints out new address books weekly.

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One feature of Power Up's \$99.95 Address Book Plus is its ability to automatically lay out a 2 x 3 5/8-inch "Instabook," which can be printed on ordinary paper and stapled together for traveling. One page of an Instabook is shown above.

rate your addresses into different groups for mailing lists or contact files, a structured database saves time in the long run. Also data can be exported to other database files in an orderly fashion.

For a DA, TouchBASE surprisingly shares many of the same features offered by DynoDex and ABP. Dozens of features are automated, like tab order choices when entering information, automatic capitalization, phone number hyphen formatting, and order setting for importing and exporting data. Printing options include fax forms, labels, envelopes and double-sided address books. Up to eight phone numbers can be held for each contact and five customizable fields each hold thirty characters, enough to serve as a tickler file or to keep track of literature sent to clients.

The wire-bound manual was the most thorough and easily understood



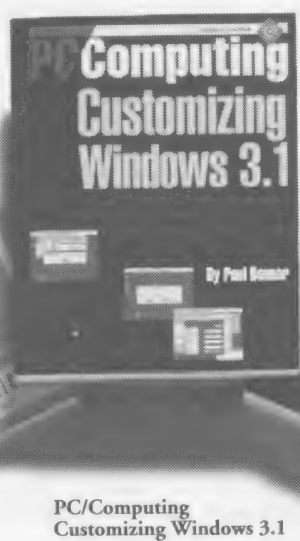
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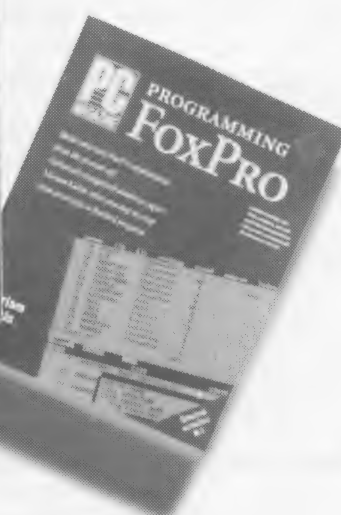
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Address Book Plus

Although it pauses before opening, this DA offers both a long format and a short format for quick references showing only names and addresses. Again, the real power is in the application. ABP attempts to take the pain out of entering data in separate fields; a field format offers pull-down windows for each entry with "hot keys" that hold 45 "category codes," such as job title or type of business. Entries can be sorted into separate preset categories.

An additional "smart list" places commonly used terms in pop-up menus. Overlapping windows display both individual cards and a list view. Import and export specifications can be saved for later use, and ten different sorts can be saved on the pull down menu.

ABP has the most limited notes field with only 2,056 characters but it will export to the Sharp Wizard and the Casio Bass electronic pocket address books. ABP sent me a carton of perforated, drilled address book pa-

per with black spiral wire binding to make my own address books. There are literally dozens of preset layouts for address books and each is previewed on screen before printing. Any format not found here can be customized. A 2x3 5/8-inch "Instabook" can be printed on ordinary paper and stapled together for traveling.

Conclusions

After using all of these programs, I wish I could say one is clearly supe-

rior. The good news is that they all provide essential features like importing/exporting, dialing and printing. They differ in how they accomplish their tasks. Hopefully, the above descriptions will point you in the right direction to examine the package that best fits your needs.

Personally, I use Intouch because of its ability to quickly locate contacts when I'm on the phone or in another application. But there is a major drawback. If I want to print an address book, I'm dead in the water. I can only print individual records. Because structured databases do the job of printing a variety of formats best, I would like to be able to export to something like ABP or TouchBASE, but then I lose my notes. I don't have the patience to tab between fields or open an application before entering names and addresses.

Fortunately all these programs are upgrading because the market is growing more competitive. Many of the people I interviewed wanted to integrate their schedules with their address books, so look for this change in the market soon. Currently none of these programs are perfect for all of my needs, but I wouldn't be without one.

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Donald Monkerud is a freelance writer based in Aptos, Calif. He writes for Hitachi Business Systems, MacWeek and The San Jose Business Journal.

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MACUPDATE

Mac Telephone Support On Multiple Products From Teleguru

Teleguru (Vienna, Va.), a telephone support service for Macintosh users, says the service was started because of frustration over poor support from Macintosh vendors. It now claims to be one of the largest support services in the country.

Henry Valentino, one of the founders of the service, said he spent an hour and a half on hold with a vendor and when he finally got through, they told him the problem was due to another vendor's software and they could not help him. Although the support was via an 800 number, Valentino said, "I decided this support wasn't really free at all."

Teleguru says it has a group of Mac experts with a total of 110 years of experience in support and the service supports over 100 Macintosh programs.

Teleguru says that on the average, a Mac user operates five applications with many INITs and extensions. To offer better service, each user has a number that, once given to the support representative, allows the rep to call up the user's particular system con-

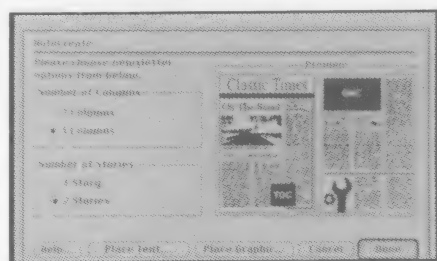
figuration and the history of past support calls. The company says it has also built its own "knowledgebase" of problems and answers based on its history of support calls that are available via computerized look-up to support representatives.

The company says it also provides services designed specifically for corporate customers who want to provide extensions to in-house help as well as those who want to go completely to outside support. The company says it provides detailed cost control accounting for those corporate customers.

Support can be charged to a telephone bill, a credit card, or a monthly invoice, Teleguru said. Several different support plans are available and while the company says Mac users will spend less time, its rates are by the minute and vary from \$1.88 to \$2.95 per minute, depending on the support plan the user chooses. For further information, call 800/759-4878.

— Linda Rohrbough, Newsbytes

Personal Press 2.0



Aldus Corporation has announced Aldus Personal Press 2.0, an entry-level page layout program. Developed by Aldus subsidiary Silicon Beach Software (San Diego, Calif.), Personal Press designs and assembles users' text and graphics automatically.

Personal Press 2.0 includes over 50 "intelligent" AutoCreate templates, which present users with a series of options regarding how they'd like the document to look (two or three columns, with or without a table of contents, and so on), and will guide them through creating it with their own text and graphics. The company says the program will then design, build, and "clean up" the document down to the last detail, so it will be ready to print "in a matter of minutes."

Aldus Personal Press 2.0 has a suggested retail price of \$199, but registered owners of version 1.0 or 1.01 can upgrade to 2.0 for \$39.99. For more information, contact Silicon Beach Software at 619/695-6956.

After Hours Software Releases DateBook

After Hours Software (Van Nuys, Calif.) has released DateBook, a Macintosh personal information manager program. DateBook is an organizer that keeps track of appointments, schedules, events, to-do lists, reminders, and tasks.

DateBook provides year, month, week, day and list views, sets alarms, accesses and updates TouchBase data files, defines recurring events and tasks, and imports and exports data. It can print day, week, month, year, and DayTimer, DayRunner and Filofax formats, according to the company.

The integration of DateBook and TouchBase means that users can access contact information in TouchBase while adding appointments or events in DateBook. DateBook also automatically adds appointment and event information to the contact's TouchBase record.

The suggested retail price of DateBook is \$125. Registered TouchBase owners can purchase DateBook directly from After Hours Software (818/780-2220) for \$59.95, and a bundle of TouchBase and DateBook is available that offers both products for a suggested retail price of \$195.

ShadowWriter 2.0

Gizmo Technologies (Fremont, Calif.) has announced ShadowWriter 2.0, an upgrade to their ShadowWriter software that allows stand-alone personal printers to be shared by all the Macs on a network. Not only did Gizmo upgrade ShadowWriter to work with virtually any serial printer on the market, but it also cut the software's list price by 40 percent.

ShadowWriter 2.0 transforms personal printers, such as Apple personal printers, third-party serial-connected printers and most color printers or plotters on the market, into network-shareable printers. With this software, a Mac workgroup can easily upgrade its stand-alone printers into office-wide printing tools, according to the company.

Accelerator Support For LC and LC II

DayStar Digital (Flowery Branch, Ga.) has begun shipping the PowerCache Adapter LC. This single adapter allows either a Mac LC or LC II user to take advantage of DayStar's PowerCache CPU accelerator, the company explains. With the addition of the PowerCache Adapter LC, all DayStar PowerCache accelerators shipped since August 1991 support eight Macintosh models — the Macintosh SE/30, LC, LC II, II, IIx, IIcx, IIsi and IICI.

"The new LC adapter provides a high-performance upgrade path for LC or LC II users," said Andrew Lewis, president of DayStar. "The 33MHz PowerCache doubles the speed of the LC family. For the ultimate in power, the 50MHz PowerCache lets an LC run at Macintosh Quadra speeds."

The PowerCache is completely compatible with all Macintosh system hardware and software, according to the company. The PowerCache is the only Macintosh LC accelerator that supports Apple System 7, according to the company.

The PowerCache comes in three speeds, 33-, 40-, and 50MHz, and a math chip is optional. If a user wishes to move the PowerCache to another supported Macintosh, he can simply swap adapters with DayStar at no charge. Furthermore, a user can upgrade to a faster PowerCache accelerator by paying only the difference in the retail cost. The 33MHz PowerCache accelerator carries a suggested retail price of \$949, the 40MHz accelerator \$1,249, and the 50MHz accelerator \$1,949. Adapters for the Mac SE/30, LC, LC II, II, IIx, IIcx, and IIsi are \$49 each. The Mac IICI does not require an adapter. DayStar offers a three-year warranty, toll-free technical support, online support from AppleLink and CompuServe, and a 30-day money-back guarantee from participating resellers. For more information, call 404/967-2077.

ShadowWriter 2.0 is shipping at a suggested retail price of \$109. Each ShadowWriter package allows an unlimited number of Macs to share a printer over a network. Current ShadowWriter users can upgrade for \$20, and free upgrades are available for registered users who purchased after April 1, 1992. For further information contact Gizmo Technologies at 510/623-7899.

RightWriter 3.2 For the Macintosh

Que Software (Carmel, Ind.) has released RightWriter 3.2 for the Macintosh, an update of its grammar and style checker. Features include access to documents prepared in other word processors, including those in some integrated packages, and an audio/visual fun element.

RightWriter checks for errors in grammar, style, word usage, capitalization and punctuation.

Also included is Cool Mac Stacks & Sounds, a product from Hayden Publishing that adds visual and audio features.

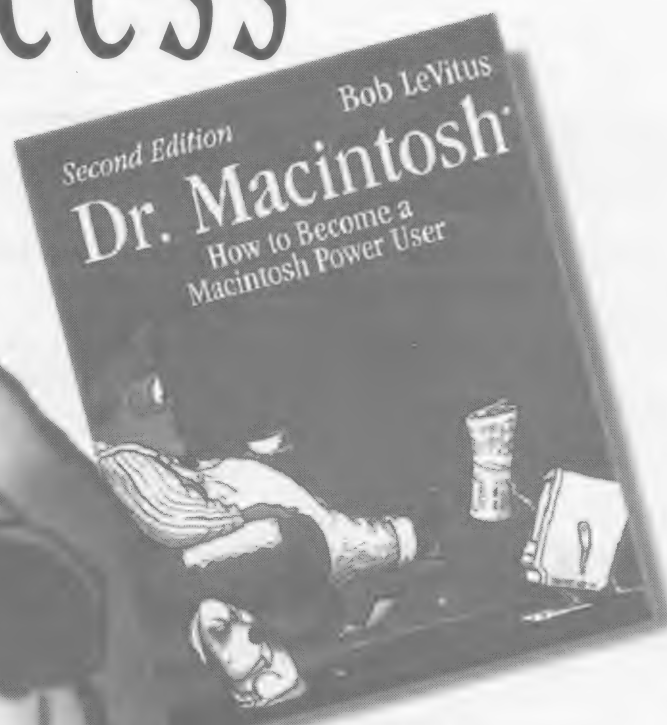
RightWriter 3.2 for the Macintosh has a suggested list price of \$99.95.

Users of earlier versions of RightWriter for the Mac can upgrade for \$15 by calling 800/428-5331.

— Jim Mallory, Newsbytes



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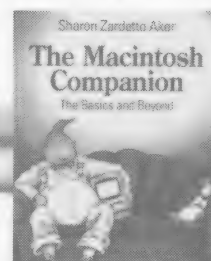


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CorelDraw 3.0 Adds Many Functions

Corel Systems (Ottawa, Ontario) has announced a new release of its CorelDraw graphics software that extends the package with business chart creation, image editing, and a presentation capability. CorelDraw 3.0 will also add new features to the software's original vector-based drawing module.

"We've taken the approach that you can do everything in graphics in one package," said Michael Cowpland, Corel's president and chief executive.

In addition to the drawing module that gave the package its name, CorelDraw 3.0 includes three new modules: CorelChart, CorelPhoto-Paint, and CorelShow.

CorelChart is a data driven charting module for creating business graphs. The vendor said it can handle true three-dimensional charting and pictographs.

CorelPhoto-Paint is actually Z-Soft's PhotoFinish software, incorporated into CorelDraw through an agreement with Z-Soft. Its capabilities include retouching of images, flexible color control, and the application of automatic retouching filters to scanned images, according to Corel.

Corel has also added a presentation module called CorelShow, which allows users to put together desktop presentations of images created in CorelDraw or imported from other software.

CorelDraw also includes the Mosaic visual file manager, which allows users to preview graphic files in several formats, and CorelTrace, a tool for converting black-and-white bit-mapped images into vector graphics.

Capabilities added to the flagship CorelDraw module include the ability to edit graphics in preview form as well as in wire-frame mode, unlimited layers, improved precision, and on-screen text editing, the company said.

With this release, Corel will begin shipping the CD-ROM version of CorelDraw in every package. While each package will contain all of the software's functions on standard diskettes, Cowpland said, the CD-ROM will provide a clip-art library of more than 14,000 images, more than 100 animations in Autodesk flic format, and Corel's complete library of Type 1 fonts, as well as a set of tutorials.

CorelDraw version 3.0 is due to begin shipping this month, with a suggested retail price of \$595. Registered users of any previous version will be able to upgrade for \$149. For more information, call 613/728-8200.

— Grant Buckler, Newsbytes

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NEW PRODUCTS

Font Utility Converts Any Typeface Format Into Any Other

Atech Software Inc. of Carlsbad, Calif. has begun shipping its newest version of AllType, giving Windows users the ability to convert any typeface format into any other and giving DOS users more power and flexibility, the company claims.

List priced at \$79.95, AllType, using multiple master technology similar to Adobe's, converts scalable typefaces to and from all major typeface formats while preserving hinting information for high-quality output.

AllType supports conversion between Intellifont for HP's LaserJet III printers, PostScript, TrueType, Atech FastFont, Bitstream Fontware, GeoWorks and Nimbus Q formats, according to the company.

It allows users to create new type-

faces with bold, italic, bold italic, and hollow styles, as well as thin, wide, condensed, and expanded width variations. Users can also angle type up to 45 degrees and change leading, pitch, or weight from zero to 999 percent of the original point size.

AllType is fully compatible with, and installs into, all of today's popular applications including Windows, WordPerfect, Ami Pro, Aldus PageMaker, Ventura Publisher, CorelDraw, GeoWorks, Express Publisher, and Adobe Type Manager, Type Align, and Illustrator. AllType also includes a DOS interface. For more information, call 800/786-FONT.

ALR Intros Line Of Multimedia Machines

Advanced Logic Research (ALR; Irvine, Calif.), is offering MPC machines to its Flyer line of computer systems and plans to price the new computers significantly lower than the competition.

ALR says the average MPC retails for around \$4,500 but it is offering the its MPC systems starting at \$2,795.

The company is offering two new MPC systems, the Powerflex Flyer 3SX/25 MPC for \$2,795 and the Flyer 32DT 4SX/25 MPC for \$3,295. Both computers offer SuperVGA monitors with 1024x768 resolution, ALR said.

Both systems come with a Pro Audio Spectrum Plus sound board from Media Vision and an internal Sony CDU-31 ACD CD-ROM drive with a fast 340 millisecond access time. Both also include a flash ROM BIOS system so the hardware peripherals that the system can support are easily upgraded via software in the future, ALR said.

The software included with the systems is ALR's version of MS-DOS 5.0; Microsoft Windows 3.1; Microsoft Multimedia Works, an integrated software package including a talking tutorial, word processor, spreadsheet and charting database, drawing and telecommunications capability; Microsoft Bookshelf, a dictionary, encyclopedia and atlas; CD-ROM discs containing education, reference, business and entertainment software; and Multimedia Beethoven, offering music compositions.

Compared to similar MPC units from Tandy, ALR says its 486SX-based computer is faster and thousands less than a less powerful Tandy unit. Call 800/444-4257.

— Linda Rohrbough, Newsbytes

Lotus Sees Sound Product As Multimedia For Masses

Lotus Development (Cambridge, Mass.) has unveiled Lotus Sound, software to let users add voice annotation or other sound to their files. Lotus sees the product, the first of a planned series of tools for working with added media such as sound and video, as a step toward bringing multimedia into the mainstream of business computing.

"Sound is the first new media type that people will get comfortable with," says Steve Barlow, Lotus' product manager for multimedia.

Lotus Sound will work with Lotus packages such as 1-2-3 for Windows and the Ami Pro word processor, Barlow said, or with applications from other vendors if they support OLE.

It attaches the sound files to the original documents and indicates their presence with an icon that looks like a microphone. Later, clicking on the microphone plays back the sound.

The software requires a microphone and speaker device that can be plugged into the back of a personal computer through the parallel port. Lotus plans to sell the software through other companies that manufacture such devices.

— Grant Buckler, Newsbytes

WordPerfect 5.1 For Windows

WordPerfect (Orem, Utah) said that it is shipping an interim release of WordPerfect 5.1 for Windows.

According to the company, the interim release includes enhancements such as "drag and drop," "zoom edit," "bullet," and "envelope" macros. There's also more help showing the user how to create and edit macros.

Drag and drop allows the user to highlight desired text, click anywhere in the highlighted area, and drag the highlighted portion to a new location. There's an insertion point, so you can position it exactly where you want to move it. As an alternative to moving, you can hold down the Control key and copy the selected text to another location in the document.

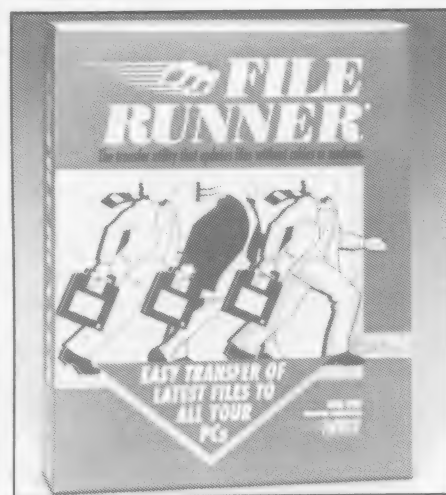
Zoom edit uses a zoom button on the ruler that allows the user to see and edit the page in magnifications from 50 to 400 percent.

Bullet macro allows the user to automatically add bullets to selected text.

The interim release is free to any WordPerfect user who has reported a defect in the software, or "bug." Others will pay \$15 for the set of six 3 1/2-inch high-density disks, or \$9 for the 5 1/4-inch disk set. Call 800/321-4566 for more information.

— Jim Mallory, Newsbytes

FileRunner Synchronizes PC Files



MBS Technologies (Arcadia, Calif.), has announced FileRunner, a program for anyone who uses more than one PC and needs to transfer data from one PC to others. It simply uses a floppy disk and proprietary Overwrite Safeguard algorithms to transfer and maintain identical files on each of your PCs. The company says it literally synchronizes the files on all your PCs.

It combines data compression, virus checking and, for the first time anywhere, Overwrite Safeguard. Overwrite Safeguard is the ability to detect when a critical file has been altered on one or more computers. It gives you a chance to keep both copies for later review, protecting you from accidentally overwriting important information during transfer.

The FileRunner package will be available this month for a suggested introductory price of \$99.95. For further information, call 800/860-8700.

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The Boston Computer Exchange

The NeXTCube and NeXT Workstation made their debut on the Big Board of the Boston Computer Exchange. It was the sheer volume of bid and ask activity that was striking. The recent introduction of the upgraded NeXTCube Turbo with 16 to 32 megabytes of RAM and between 400 megabytes and 1.6 gigabytes of storage has made the older models a hot item on the secondary market. Tom Stoner, NeXT Desk Manager at the Exchange, said he's been swamped with new interest from both buyers and sellers of NeXT machines. The most popular is the NeXT Cube

at \$5,400 and the NeXTstation intro model with a 17-inch MegaPixel color monitor selling for \$3,700. IBM models were off between \$100 and \$200 per model due to lack of demand for the pre-386 machines. The depressed price for new models of the 386s has turned most of the older machines into donation fodder. The AT-339 was off \$100 at \$500, the PS/2 Model 50Z was off \$50 to close at \$600 and the high-end PS/2 Model 80 was off \$1,500 to close at \$1,900.

The following prices are for the week ending May 15, 1992

The BoCoEx Index Of Used Computer Prices

Base Product	RAM	Drive	(\$)Price
ISA Bus 80286	1MB	30MB	450
ISA Bus 80386 SX	1MB	40MB	900
ISA Bus 80386 DX	2MB	40MB	1000
VGA Monochrome Monitor			50
VGA Color Monitor			200
Laser Printer - less than 7 ppm			450
Laser Printer - HP Series 2 Compatible			800
Laser Printer - HP Series 3 Compatible			1100

Machine	(\$)Price	(\$)Ask	(\$)Bid
IBM AT 339 30MB	500	1000	250
IBM PS/2 Model 50Z 30MB	600	1100	325
IBM PS/2 Model 55SX 30MB	1200	1400	1100
IBM PS/2 Model 60 40MB	600	900	325
IBM PS/2 Model 70 120MB	2650	2800	1200
Compaq Portable III 20MB	550	650	250
Compaq Portable 386 100MB	1700	2125	1000
Compaq SLT-286 20MB	700	800	400
Compaq LTE-286 40MB	900	1100	500
Compaq Deskpro 386 30MB	900	1200	700
Zenith SupersPort 286 40MB	800	800	450
Macintosh Classic 40MB	875	1050	700
Macintosh SE Floppy	575	700	450
Macintosh SE 20MB	775	875	600
Macintosh SE/30 40MB	1600	1550	1200
Macintosh IICx 80MB	2700	3000	2000
Macintosh IIfx 80MB	4200	4900	3700
Apple ImageWriter II	225	350	100
Apple LaserWriter IINT	1600	1750	1200
HP LaserJet II	850	950	550
HP LaserJet III	1000	1200	900
Toshiba T-1200XE 20MB	750	1000	550
Toshiba T-1600 20MB	750	750	400
Toshiba T-2000 SX 40MB	1200	2200	1450
Toshiba T-3100 SX 40MB	1575	1750	1500
Toshiba T-5100 40MB	1400	1700	900

BoCoEx Index prices are based on complete systems with keyboard, monochrome monitor and adapter, less the value of any software or peripherals. Boston Computer Exchange is available at 617/542-4414; Buyer's HotLine: 800/262-6399. BoCoEx Index is available on Fax Yourself Information, 617/542-2345 extension 300.

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Please Note: Boston Computer Society (BCS) listings are courtesy of the BCS. BCS events are for members only; non-members are invited to attend one meeting before joining the Society. BCS headquarters are at One Kendall Square, Cambridge, MA 02139. Telephone 617/252-0600.

June 4

BCS IBM
"Printers." Learn the benefits and drawbacks of certain printers, featuring demonstrations by Hewlett-Packard and Seiko. Bring your BCS membership card to participate in drawings for door prizes. 7:30 p.m., Aquinas College, 15 Walnut Park, Newton, Mass. Call BCS IBM office at 617/964-2547.

Lotus 1-2-3 for Beginners
A one-day workshop offered by Dun & Bradstreet Business Education Services (New York). To be held at the Sheraton Inn Lowell in Lowell, Mass. Fee: \$129. Attendees receive 20 free macro routines. Call 212/312-6880.

June 8

BCS User Interface Design
"The Knowledge Navigator," a film by Apple Computer, presents one possible scenario of computing in the future. Anyone involved in the design of computer-human interfaces should see this film. 7 p.m., Lotus Development Corp., One Rogers Street, Cambridge, Mass. Call Bruce Kulik at 617/488-3069.

June 9

BCS Lotus
"The Macintosh Version of 1-2-3." 7 p.m., Lotus Rogers Auditorium, One Rogers Street, Cambridge, Mass. Call BCS office at 617/252-0600.

Computer Graphics
A four-day (June 9-12) course offered by Learning Group International (Los Angeles), providing a comprehensive overview of the state-of-the-art in computer graphics software and hardware. Fee: \$1,795. Call 800/421-8166.

June 10

BCS Macintosh
Learn about MS Word 5.0 and the custom tool palettes by Alki. 7 p.m., MIT Building E51, Room 329, 50 Wadsworth Street, Cambridge, Mass. Call the BCS Mac office at 617/625-7080.

June 13

BCS Visually Impaired
"Finding Jobs." Phil Oliver, manager of employment services at the Massachusetts Commission for the Blind, demonstrates various software useful to blind job seekers. 1 p.m., location to be announced. For details, call Jamal Mazrui at 617/666-9856, evenings.

June 17

BCS Desktop Publishing
"The New Designer." Graphic designers are organizing all phases of a job,

CALENDAR

Meeting times and locations may change at the last minute; call first for confirmation.

We welcome notices of upcoming events for our Calendar. Notices must be received by the second Friday of the month prior to publication. Please mail information to: Calendar, Boston Computer Currents, 4 Chrysler Road, Natick, MA 01760. Or send your notice via MCI Mail to "MZIENTARA." Or fax to 617/593-2682.

including typesetting, printing and progress chasing. Raymond Yu, from Pandemonium Design, shows his work and explains what he's done to get jobs completed. 7 p.m., MIT Building E51, Room 144, 50 Wadsworth Street, Cambridge, Mass. Call David Field at 508/346-9401.

June 18

BCS Consultants & Entrepreneurs
"Underpreneurship: How to Make Money Underpricing Your Services." Russ Walter gives free advice by phone 24 hours a day. He sells 600-page books for \$15 or less. His book, *The Secret Guide to Computers*, is in its 14th edition. Come and find out how The Wizard makes a living. 7:30 p.m., 128 Entrepreneurs' Center, 200 Fifth Avenue, Waltham, Mass. Call Louise Sacco for further information at 617/444-6631.

BCS Networking
"Software Metering and Remote Control." Funk Software demonstrates two new utilities for NetWare: a metering utility that allows LAN administrators to track software usage and prevent license violations, and a remote control program that allows a user at one computer to control another computer on the network. 7:30 p.m., MIT Building E51, Room 144, 50 Wadsworth Street, Cambridge, Mass. Call Bill Chosiad at 617/221-2439, days.

Society for Information Management
Allan Alter, editor of *CIO Magazine*, will speak at luncheon meeting on the topic of "IS Cross-Functional Relationships." 12-2 p.m. at the Newton Marriott, Newton, Mass. For fees and reservations, call 617/237-1570.

June 19

Fundamentals of Design for DTP
A one-day seminar presented by Promotional Perspectives (Ann Arbor, Mich.), to be held at the Omni Parker House, 60 School Street, Boston. Fee: \$225. Discounts available. For more information, call 313/994-0007.

June 20

FoxPro Seminars
The FoxTrain Alliance presents two seminars, "An Introduction to FoxPro" (10 a.m. to noon), and "The Power of FoxPro 2" (1-3 p.m.), to be held at Babson College, Tomasso 209, Wellesley, Mass. Fee: \$20 for one session, \$30 for both. Call Jo-Ann Edinburg at 617/965-2424.

June 22

Managing Technology-Enabled Change
A workshop jointly sponsored by the Society for Information Management and the Financial Executives Institute. To be held at the Newton Marriott, Newton, Mass., 12-6:30 p.m. Call 617/237-1570.

June 23

BCS Business
"Productivity on the Desktop." A panel of business users talk about their favorite software packages. 7:30 p.m., 128 Entrepreneurs' Center, 200 Fifth Avenue, Waltham, Mass. Call Dennis Noonan at 617/237-1483.

June 24

BCS General Meeting
"Meet the New BCS President." We introduce and welcome Robert Grenoble,

the new BCS president. 7:30 p.m., New England Life Hall, 225 Clarendon Street, Boston. Call BCS at 617/252-0600.

June 29

Database World and Client/Server World Conference & Exposition
A three-day (June 29 - July 1) double conference presented by Digital Consulting, Inc. (Andover, Mass.), to be held at the Hynes Convention Center, 900 Boylston Street, Boston. Fee (includes both shows): one day, \$595; two days, \$795; three days, \$995. Call 508/470-3880.

BCS Women
"Networking — the Human Kind." BCS women network and plan next season's programs. 7 p.m., BCS IBM Group Offices, 188 Needham Street, Suite 230, Newton, Mass. Call Lucy Rakov at 617/969-4556.

Troubleshooting & Maintaining PC, XT, AT, PS/2 & Compatibles
A two-day (June 29-30) hands-on seminar offered by Data-Tech Institute (Clifton, N.J.), to be held at The Lenox Hotel, 710 Boylston Street, Boston. Fee: \$795. To register, call 201/478-5400.

July 1

How to Master the Macintosh
A two-day (July 1-2) workshop presented by MacAcademy (Ormond Beach, Fla.), to be held at the Burlington Marriott, Routes 128 & 3A, Burlington, Mass. Fee: \$279. Call 800/527-1914.

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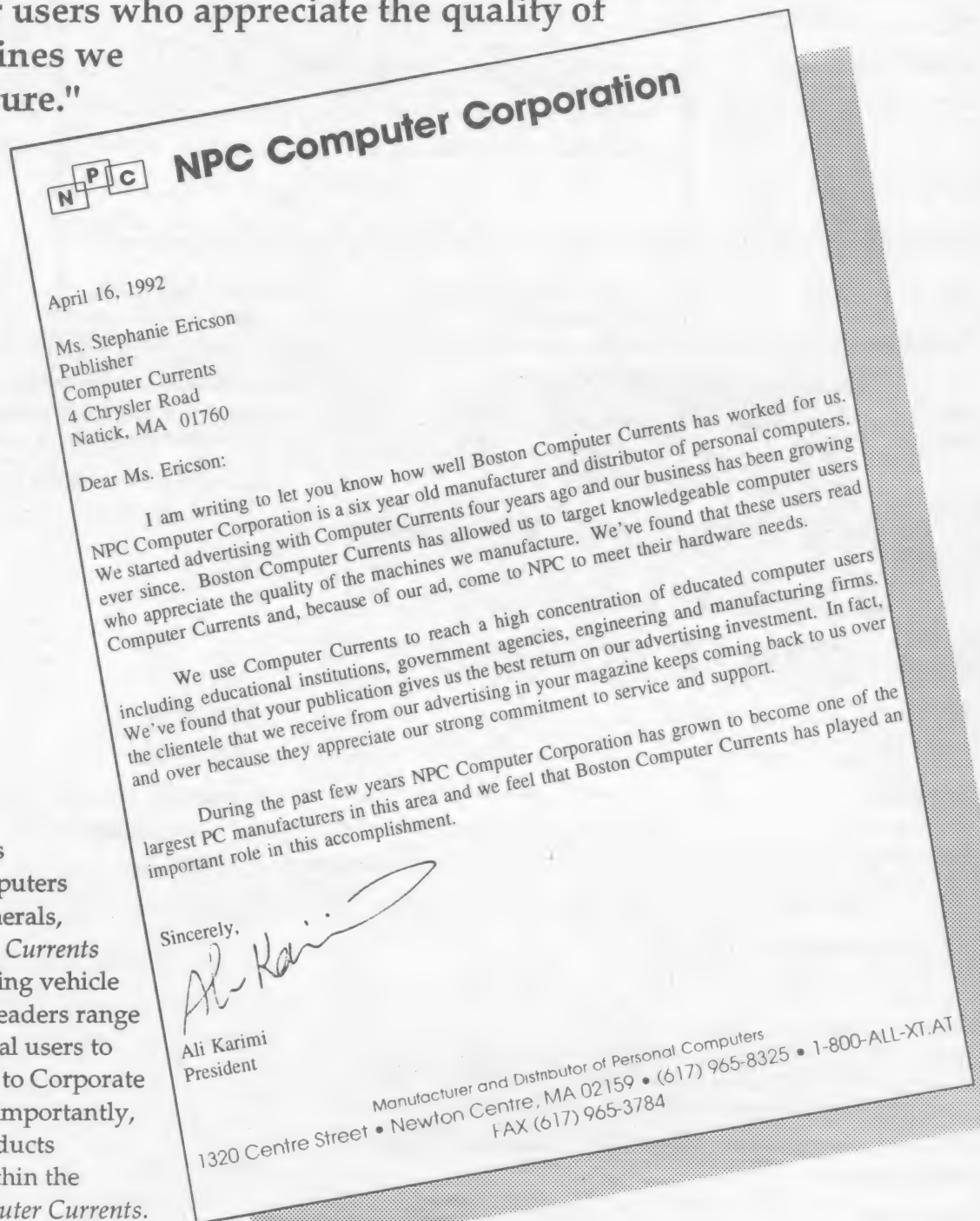
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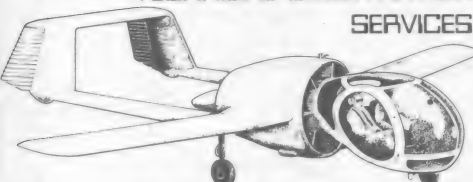
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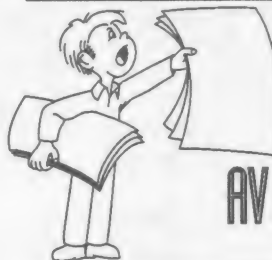
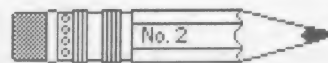
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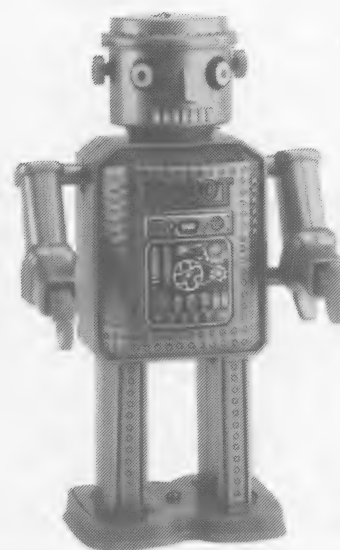
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Cheryl Tully

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Michael W. Gencarelle

In our next issue:

Information Tools For The '90s Modems, Fax Modems, and Online Services

Our annual feature on online services is complemented this year by a special report on the booming modem and fax/modem market. High-speed modems and fax/modem combos will be reviewed and we'll include useful consumer tips for buying the right products. In the online service arena, we'll examine Prodigy, CompuServe and other leading online services and the specific forums and benefits for those who make the online connection.

Publication Date: July 1992
Advertising Space Reservation Deadline: June 8, 1992

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24 Primary business activity of your firm (check one only)

- 01 ☐ Manufacturing of computer equipment, computers, DP hardware, peripherals
02 ☐ Software development
03 ☐ Manufacturing other
04 ☐ Agriculture, mining, construction
05 ☐ Transportation
06 ☐ Communications
07 ☐ Utilities
08 ☐ Computer related retailer
09 ☐ Non-computer related retailer
10 ☐ Finance, banking, insurance
11 ☐ Real estate
12 ☐ Health, medical service
13 ☐ Legal
14 ☐ Education
15 ☐ Data processing, computer service
16 ☐ Government
17 ☐ Consultant
18 ☐ Wholesale/Distributor
19 ☐ Research/Development
20 ☐ Engineering/Architecture
21 ☐ Other business services
22 ☐ Advertising
23 ☐ Sales/Marketing
24 ☐ Personnel Placement
25 ☐ Entertainment
26 ☐ Other (please specify) _____

21 Title (check one only)

- 01 ☐ Chairman/Pres./Owner/Partner
02 ☐ VP—All
03 ☐ Controller/Treasurer
04 ☐ Director
05 ☐ General Manager
06 ☐ Business Manager
07 ☐ Project Manager Chief/Group Leader
08 ☐ Prod./Merch. Manager
09 ☐ Manager/Supervisor not listed above
10 ☐ Data Base Administrator
11 ☐ Other Administrator
12 ☐ Physician
13 ☐ Accountant
14 ☐ Attorney
15 ☐ Consultant/Advisor
16 ☐ Bus. Microcomputer Specialist
17 ☐ Systems Analyst
18 ☐ Writer
19 ☐ Coordinator
20 ☐ Programmer
21 ☐ Engineer
22 ☐ Educator
23 ☐ Representative
24 ☐ Other (please specify) _____

25 Company Size (check one only)

- A ☐ Under 10 employees E ☐ 250-999
B ☐ 10-24 F ☐ 1000-2499
C ☐ 25-99 G ☐ 2500-4999
D ☐ 100-249 H ☐ Over 5000

26 Department (check one only)

- 01 ☐ Accounting
02 ☐ Administration Management
03 ☐ Communications
04 ☐ Consulting
05 ☐ EDP/MIS
06 ☐ Education/Training
07 ☐ Engineering
08 ☐ Finance
09 ☐ Marketing
10 ☐ Operations
11 ☐ Personnel
12 ☐ Production/Plant
13 ☐ Purchasing
14 ☐ Research & Development
15 ☐ Sales
16 ☐ Other (please specify) _____

Does your firm have personal computers?

☐ Yes: If yes, please indicate quantities below. Complete both columns.
☐ No

34: Number currently owned:

- | | |
|------------------------------------|---------|
| A _____ PC (286) Compatible | A _____ |
| B _____ PC (386) Compatible | B _____ |
| C _____ PC (486) Compatible | C _____ |
| D _____ Notebook PC | D _____ |
| E _____ Macintosh Classic, or SE | E _____ |
| F _____ Macintosh LC | F _____ |
| G _____ Macintosh IIfx, IIsi, IICI | G _____ |
| H _____ Macintosh IIfx | H _____ |
| I _____ Macintosh Powerbook | I _____ |
| J _____ Amiga | J _____ |
| K _____ NeXT Workstation | K _____ |
| L _____ Sun SPARC system | L _____ |
| M _____ Other (Please Specify) | M _____ |

35: Number plan to purchase within next 12 months:

30 Please estimate your department's budget for computer hardware, software and supplies for the next 12 months:

- A ☐ Over \$500,000
B ☐ 250,000 to 499,999
C ☐ 100,000 to 249,999
D ☐ 50,000 to 99,999
E ☐ 25,000 to 49,999
F ☐ 10,000 to 24,999
G ☐ Under 10,000

31 Through what channels will your department purchase its hardware software and supplies? (Check as many as apply)

- A ☐ Computer Retail Store
B ☐ Distributor/Wholesaler
C ☐ Value Added Reseller
D ☐ Consultant
E ☐ Mail Order
F ☐ Manufacturer
G ☐ Other _____

In which of the following ways are you yourself involved with personal computers, accessories and supplies?

- ☐ Use them
☐ Recommend them
☐ Establish specifications
☐ Approve purchase
☐ Acquire them
☐ Evaluate or select suppliers
☐ Train people to use
☐ Sell them
☐ Develop or manufacture
☐ No involvement
☐ Other involvement (please specify) _____

32 For how many personal computers or microcomputer systems do you have this involvement? (Check one only.)

- A ☐ 1-3 D ☐ 25-49
B ☐ 4-9 E ☐ 50-99
C ☐ 10-24 F ☐ 100 or more

PLEASE BE SURE TO SIGN YOUR NAME AND INDICATE YOUR TITLE

Your signature _____

Print your name _____

Title _____

Date _____

Company _____

Address _____

City/State/Zip _____

Have you answered all questions?



By Lincoln Spector

Grouping Users



Ladies and gentlemen, may I have your attention, please. For those of you who don't know where you are, this is a meeting of the California Hawaii Utah Georgia Arizona Local User Group. If you do know where you are, an envelope is being passed around for your CHUGALUG dues.

Now the first order of business tonight is...

Excuse me, Frank. You don't know me, but I've got a quick question about the Plum Pudding Accounting program I downloaded off of the BBS last week.

I'm sorry, but we'll have questions and answers after our presentations.

This will just take a couple of seconds.

Look, Maria is waiting with her...

Frank, while we're on the subject of Plum Pudding Accounting, will it work on my Osborne 1?

No, Henry, it won't. Now, all of you, please. Maria is waiting with her presentation on using C++ interface objects in COBOL, and we have someone here from MicroFlaven to show us a new program. We'll have general questions and answers...

If you had let me ask the question when I first stood up, we'd be finished with it by now.

Okay. But make it quick.

Thank you. I don't really know much about this PC stuff, but according to my nephew, I have a Cousin Billie Bob SX-16 with a Nylon motherboard, an I Am I bias, a forty-millibyte Adapted Mmffmm hard disk, and one millibyte of LAN. My CONFIG.SYS file reads...

Excuse me, but could you just ask your question?

Don't you want to know my configuration, first?

I don't even want to know your name. Now, what's your problem?

Well, I downloaded the program, PLUM31A.ZIP, but when I try to run it,

I get a message that says "Bad command or file name." What does that mean?

It means you have a bad command or file name. Reformatting your hard disk should take care of it.

Now that that's settled, let's get on with the business of the evening. Maria has prepared a presentation for us on using C++ interface objects in COBOL. Maria?

Uh, Frank, didn't you get my phone call this afternoon?

No, I...

The program I wrote for the demonstration turned out to have a little bug in it. Nothing serious, but it may take a day or two to reconstruct my hard disk. Can I put my demonstration off until next month?

I, uh, yeah, I guess so. In which case, I'd like to introduce our next speaker, Mertin Mufty of MicroFlaven Software, who's here to show us a new desktop graphing application.

Thanks, Frank, but you really shouldn't call MishMosh a desktop graphing application, since it goes so far beyond what anyone has ever done in that category. It's really more of a desktop grafting applica-

tion, because it allows you to graft different kinds of data onto your desktop, and even to graft different kinds of desktops. Frank, do you have a Mac II I can run this on?

A Mac II? Uh, Mertin, CHUGALUG is a PC user group. Didn't you bring a copy of the PC version?

No, we don't have a version for the IBM.

How about Compaq?

Excuse me, but will this work on my Osborne 1?

Henry, sit down. Mertin, so what you're saying is that the software you're showing us won't run on our computers?

Well, I guess I got my demographics wrong. In that case, I'll keep my talk short. When we built MishMosh, we decided to create something revolutionary, so we threw out all the conventional concepts of graphics, data-handling, and software design...

(Ninety-three minutes later)

...thereby producing results that will wow your clients and increase your productivity on a scale that hasn't been

matched since the invention of the fountain pen. Now then...

Thank you, Mertin. I'm sure we're all grateful to Mertin Mufty of MicroFlaven for taking the time to show us some software that won't run on our computers. Mertin, I hope you'll come back soon with some...

Excuse me, but I was gonna ask for questions.

Right. Anyone have any questions for Mertin. None? Okay, let's...

Mertin, you said that MishMosh gives you laser-quality images on your screen. How is that possible?

Good question. Can I get back to you on that one?

Fine. Now that the presentations are over, we'll open the floor for general questions. Anybody?

Why do we spend so much time talking about Windows programs?

Why doesn't our BBS have everything CompuServe has?

Can we talk more about Windows programs?

My computer's infected with both the Stravinsky virus and the Three Stooges virus. Between the two of them, my system keeps crashing. My question is: When are these developers gonna get together and agree on a standard?

These are all very good questions. Unfortunately, we're out of time, so you'll have to save them for next month. As usual, this meeting's minutes will be available on a floppy for two dollars.

Can you make that an Osborne 1 floppy?

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Lincoln Spector is the author's real name, appearing on both his driver's license and his birth certificate. An associate editor at PC World, Lincoln can be reached via MCI Mail as "LSPECTOR."

Gigglebytes is a satirical column loosely based on computer industry events, trends and people. The opinions expressed in this column are the writer's and do not necessarily reflect those of Computer Currents.

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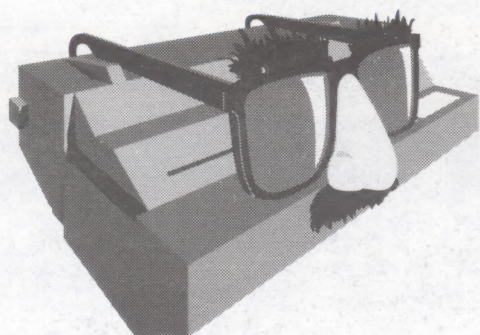
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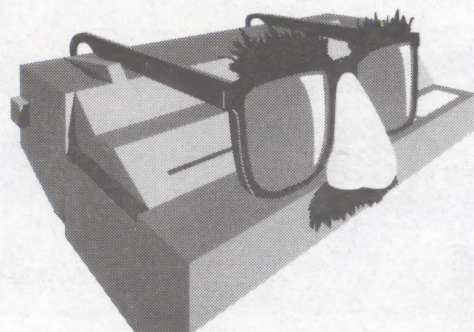
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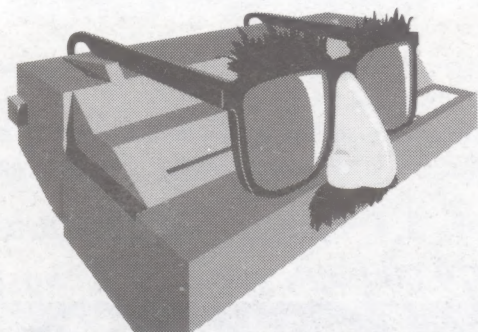
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An ill-conceived method that involves drilling holes in the toner cartridge. Contamination and failure to inspect and clean critical parts results in unhappy drill-and-fill customers.



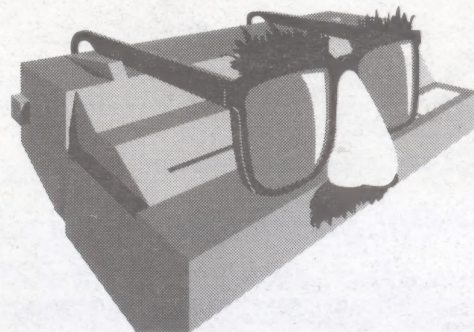
RECONDITIONERS

These cartridges get cleaned and toner is added but important parts may not be checked and replaced when necessary. Parts may wear out before the toner cartridge is empty resulting in a higher cost in materials and lost time to the customer.



REMANUFACTURERS

Worn parts may be replaced and a more effective cleaning process takes place, but in this process the customers usually get their own cartridge back. There can be a problem of contaminated toner cartridges.



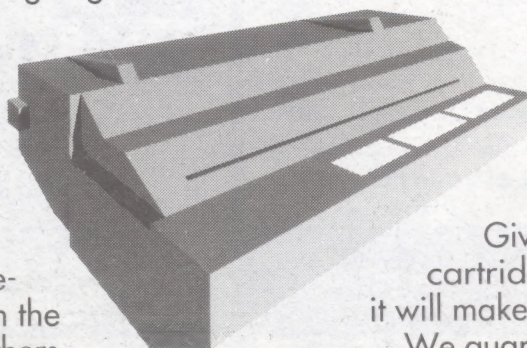
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Because a dealer who shops for price might buy any or all of these methods a customer may experience a difference in print quality and consistency from one cartridge to the next.

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